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NEPAL

Contraceptive Prevalence Survey Report 1981

Ministry of Health
NFP/MCH Project
Ram Shah Path
Kathmandu



Westinghouse
Health Systems





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PO Box 866
American City Building #400
Columbia Maryland 21044
(301) 992-0066
TELEX- 87775

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NEPAL CONTRACEPTIVE PREVALENCE SURVEY REPORT 1981

Nepal Family Planning and Maternal
Child Health Project
Ministry of Health
His Majesty's Government

and

Westinghouse Health Systems

Kathmandu, Nepal
1983

Westinghouse Health Systems
P.O. Box 866
Columbia, Maryland 21044
U.S.A.

Nepal FP/MCH Project
Ram Shah Path
Kathmandu, Nepal

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Library of Congress Card Catalog Number: 83-50093

Printed in the United States of America

1983

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FOREWORD

The Nepal Family Planning and Maternal Child Health Project (FP/MCH Project) has been one of the primary providers of family planning services in the Kingdom of Nepal since 1968. One of the important responsibilities of the Project is to conduct national and local surveys on contraceptive usage. The information collected is used to evaluate and plan the ongoing family planning programs of Nepal. The Nepal Fertility Survey 1976 was the first national survey to be carried out by the FP/MCH Project. This survey produced fertility and family planning data that have been utilized in program planning and evaluation.

During 1981, a second national survey was conducted by the FP/MCH Project. The Nepal Contraceptive Prevalence Survey (NCPS) was undertaken with technical and financial support from USAID and Westinghouse Health Systems. The objectives of the Nepal Contraceptive Prevalence Survey were the following:

- to provide comprehensive data necessary for planning and evaluating the family planning programs of Nepal
- to involve and train FP/MCH Project staff in all phases of the survey
- to enhance the capability of the project staff in conducting similar surveys at regular intervals in the future.

I am glad that this report demonstrates the accomplishment of these objectives.

Finally I would like to express my sincere appreciation to the NCPS staff who implemented and completed the project, Westinghouse Health Systems, and USAID for their technical and financial support for this survey.

Dr. Badri Raj Pande
National Director, Nepal CPS Project
Chief, FP/MCH Project

ACKNOWLEDGMENTS

The successful completion of the Nepal Contraceptive Prevalence Survey was the result of the team spirit shown by the survey staff. Many people have directly and indirectly participated in this undertaking.

The initial phases of the survey were carried out under Dr. Puspa Lal Joshi, former Chief of the Evaluation Division, FP/MCH. During the fieldwork and data processing stages, Mr. Jayanti Man Tuladhar acted as the project director.

My special thanks go to the district family planning officers, who hired the interviewers and assisted with the survey's district-level administrative and financial activities. The efforts of the field supervisors and interviewers, who performed the arduous task of data collection under adverse field conditions, are greatly appreciated.

Mr. Jayanti Man Tuladhar, Mr. Gokarna Regmi, Mr. Muniswor Mool, Mr. Tek B. Dangi, Mr. Vinaya R. Dhakhwa, and Mr. Madan K. Sharma participated actively in all the phases of this study including sample design, questionnaire design, manual preparation, training, and supervision of the fieldwork. Report writing was a collaborative effort by all of these individuals. Mr. Bhakta B. Gubhaju assisted with the sample design, writing the questionnaire, manual preparation, and training.

The staff of the National Computer Center deserve special thanks for letting us use their computer facilities in carrying out the data processing job, especially data editing and key punching.

Sincere thanks are extended to Mr. Govinda Mishra, Fiscal Section Chief, for his painstaking efforts to arrange the release of funds for the districts and at the central office in a timely fashion. I would also like to express my appreciation to Mr. Ramesh Shrestha for budget planning and account auditing, Mr. Keshav Kuwar for operating the central level accounts, and to Mr. Surya B. Singh and Mr. Sher B. Chand for administrative help.

The Nepal Contraceptive Retail Sales Project has been very helpful in facilitating communication with Westinghouse Health Systems and providing secretarial services for the first draft of this report.

I would like to express my sincere appreciation to Mr. Gary Lewis, Dr. Alfredo Aliaga, and Ms. Jeanne Cushing from Westinghouse Health Systems for their technical assistance during different phases of this study. My special thanks and appreciation go to Dr. Ann Evans, also from Westinghouse Health Systems, for her technical assistance in all phases of this study, including report writing, and for her painstaking efforts to help us complete the NCPS.

My heartfelt appreciation also goes to Mr. Dinesh Prasad Sharma for his hard work and patience in typing different drafts of this report.

Finally I would like to express my sincere gratitude to Dr. Badri Raj Pande, Chief FP/MCH Project, who also acted as the National Director for this study, for his efforts towards making this study a success.

Gokarna P.S. Regmi
Project Director
Nepal CPS Project

CHAPTER 1

INTRODUCTION

Geographical Features

Nepal is a sovereign, independent Hindu kingdom. The northern boundary of the country extends to the Tibetan region of the People's Republic of China, and it is bordered by India in the south, east, and west. Nepal is situated on the southern slopes of the Himalayas, extending from 26° 15 minutes to 30° 30 minutes north latitude and from 80° to 88° 15 minutes east longitude. Its shape is more or less rectangular with a total length of 845 kilometers from east to west, and the average width is 200 kilometers from north to south. Nepal occupies a total area of 140,640 square kilometers.

Nepal can be divided into three geographical regions on the basis of altitude, namely: (a) the Mountain, or Himalayan region, (b) the Hill region, and (c) the Terai region. The Mountain region lies in the northern part of the country at altitudes above 12,000 feet and occupies about 35 percent of the total land area. The snow line is 17,500 feet above sea level. The high Himalayan region is always covered with snow. Many world-famous snow peaks, including Mount Everest, the highest peak in the world (altitude 29,028 feet), are situated in this region. Nepal's famous rivers like the Kosi, Gandaki, and Karnali, flow from this region to the southern part of the country. The Mountain region is very thinly populated, since the climate is quite cold and the land is not suitable for cultivation. People of this region earn their livelihood mainly from cattle farming; a few are engaged in trade with Tibet.

The Hill region is the largest region in area. The altitude of this region varies from 1,000 feet to 12,000 feet above sea level. Some beautiful valleys like Kathmandu, the capital of the country, and Pokhara are situated in this region. The arable land of this region is densely populated. Cultivation is carried out in the valleys, which are broad plains, and the mountain terraces of the Mahabharat and Churia ranges, which are parallel to each other and extend east and west.

The Terai region is the lowland in the extreme southern part of the country. This region is about 25 to 32 kilometers wide and extends from east to west along the Indo-Gangetic plain. The Terai occupies about 17 percent of the total area of Nepal. The altitude is between 200 and 1,000 feet above sea level. Deposits of alluvial soil brought by the rivers originating in the Himalaya have made this region very fertile. The rich soil and favorable climate make the Terai region the main cultivation area of the country. Some industrial and trade centers, like Biratnagar in the east, Birganj in the middle, and Nepalganj in the west, are situated in this region.

Climate

Although Nepal is a small country in area, it has several different climates due to the varied topography and wide range in altitude. The Terai region has a hot, humid climate; the Hill region a moderate, pleasant climate; and the Mountain (Himalayan) region is cold and has a large amount of snow. Mainly four types of seasons --spring, summer, rainy, and winter -- occur during the year.

Political Divisions

From the administrative point of view, Nepal has been divided into five development regions, 14 zones, and 75 districts. Each district has been further divided into village and town panchayats. Thus, there are about 4,021 village panchayats and 29 urban centers, called town panchayats. Further, each town and village panchayat is divided into wards, which are the smallest political units.

Occupation

Nepal is predominantly an agricultural country. More than 95 percent of the people earn their livelihood from agriculture, and the remaining five percent are engaged in administrative work, services, and other sectors. This pattern of employment is similar for men and women, except that very few women work outside the agricultural sector. Traditional

farming practices are used, and women are heavily involved in planting, harvesting, and threshing, as well as marketing agricultural products.

Education

Illiteracy is still one of the major constraints on the development of the country. Only 19.5 percent of the people can read and write; moreover, the literacy rate among females is far below the national average. Female literacy is about 6 percent.

Ethnicity, Religion, and Language

The total population of Nepal is 15 million (preliminary count from 1981 census). Although the country is small in size, the Nepalese society has many different religions, languages, and ethnic groups.

There are about 75 major ethnic groups with different cultures and languages. Some 50 languages are spoken in different parts of the country. However, Nepali is not only the official language but is also the mother tongue of more than 52 percent of the total population. The second major language is Maithali, spoken by 11 percent, followed by Bhojpuri, which is reported as the mother tongue of 7 percent of the people. The majority of the people, whatever their mother tongue may be, can understand and speak Nepali, the official language. Being a Hindu Kingdom, a majority of the people (89 percent) of Nepal are Hindus, about 7 percent are Buddhists, 3 percent Muslims, and the remaining 1 percent follow other religions.

Fertility

Before 1974, the only sources of data available on fertility levels were the population censuses undertaken in 1952/54, 1961, and 1971. Since census data suffer from under-reporting of birth events, indirect methods have been applied by demographers to estimate fertility in Nepal. From 1974 to 1978, the Central Bureau of Statistics (CBS) conducted a series of Demographic Sample Surveys (DSS). In 1976, the Planning,

Research, and Evaluation Division of the Nepal Family Planning and Maternal and Child Health Project (FP/MCH), in collaboration with the World Fertility Survey, conducted a national survey on fertility called the Nepal Fertility Survey. Table 1.1 provides a summary of most of the available and estimated crude birth rates for Nepal since 1952. The crude birth rate (CBR) is defined as the number of births in a year per thousand midyear population. For 1977-78, the CBR was 42.6 births per thousand population.

Table 1.1 Estimated Crude Birth Rates for Nepal, 1952-78

<u>Time Period</u>	<u>Estimated CBR¹</u>
1952-1961	45-50
1961	42.1
1961-1971	41.0
1971(a)	42.0
1971(b)	42.4
1974-1975	44.7
1976	43.6 ²
	45.6 ³
1977-1978	42.6 ³

Sources: 1952-1961 -- United Nations 1965; Thakur 1960-61; Ramchandran 1969 (pp. 215-62); Krotki and Thakur 1971 (p. 81); Vaidyanathan and Gaige 1973 (pp. 278-90).

1961 -- Gubhaju 1975 (pp. 115-28).

1961-1971 -- Central Bureau of Statistics 1968.

1971(a) -- Central Bureau of Statistics 1974.

1971(b) -- Gubhaju 1974.

1974-1975 -- Central Bureau of Statistics, July 1978.

1976 -- Nepal Fertility Survey 1976.

1977-1978 -- Central Bureau of Statistics, July 1978.

¹The crude birth rate is defined as the number of births that occur in a given year per 1,000 population.

²Unadjusted.

³Adjusted.

Additional measures of fertility, the age-specific and the total fertility rates, from the Demographic Sample Survey and the Nepal Fertility Survey are shown in Table 1.2. There were minor fluctuations in age-specific fertility rates during the brief time period shown. The adjusted total fertility rate (TFR) for all women in 1976 was 6.3 children per woman.

Table 1.2 Age-specific and Total Fertility Rates for All Women, Nepal, 1974-1976

Age of Women (Years)	Age-specific Fertility Rates ¹	
	Demographic Sample Survey 1974-75 ³	Nepal Fertility Survey 1976 ⁴
15 - 19	.114	.145
20 - 24	.270	.290
25 - 29	.297	.295
30 - 34	.260	.269
35 - 39	.169	.169
40 - 44	.090	.075
45 - 49	.050	.023
Total Fertility Rate (TFR) ⁴	6.3	6.3

¹The age-specific fertility rate is defined as the number of births to women aged x to x+4 that occur in a given year per 1,000 women in that particular age group.

²The total fertility rate is defined as the number of children a woman would have by the end of her reproductive life under the assumption that the present age-specific fertility rates would remain constant during her reproductive years.

³Central Bureau of Statistics. The Demographic Sample Survey of Nepal, First Year Survey 1974-75, Kathmandu, 1975.

⁴N. Goldman et al. The Quality of Data in the Nepal Fertility Survey, WFS Scientific Reports, 6, International Statistical Institute, Voorburg, The Hague, Netherlands, December 1979, p. 21.

The Nepal Fertility Survey data also showed that cumulative fertility, that is, the mean number of children ever born to a Nepalese woman, was 5.7 for ever-married and 6.1 for currently married women. The 1971 census reported the mean number of children ever born as only 4.0, which is almost two births less than the mean reported in the NFS. The census mean is generally felt to be an underestimate. The comparative picture of children ever born is shown in Table 1.3.

Table 1.3 Mean Number of Children Ever Born to Ever-married and Currently Married Women in the 1971 Census and 1976 N.F.S. by Age at that Time

Age	Ever-married		Currently married	
	1971 Census	NFS 1976	NFS 1976	
15-19	0.3	0.3	0.3	
20-24	1.1	1.4	1.4	
25-29	2.2	2.9	2.9	
30-34	3.1	4.1	4.2	
35-39	3.7	5.1	5.2	
40-44	4.0	5.5	5.7	
45-49	4.0	5.7	6.1	

Source: Nepal Fertility Survey 1976, First Report, p. 41.

Mortality

In the absence of vital registration data, crude death rates (CDR) are estimated on the basis of census data at different periods of time. As in the case of other developing countries, Nepalese censuses also suffer from under-reporting of deaths. Demographers have applied indirect techniques to obtain realistic estimates of death rates for Nepal. Table 1.4 provides a summary of all the available estimated death rates in Nepal. Moreover, the table also clearly shows the gradually declining trend in death rates over the years.

Table 1.4 Estimates of Crude Death Rates for Nepal, 1952-78

<u>Time Period</u>	<u>Estimated CDR¹</u>
1952-1961	30-37
1961	22-27
1971	22.0
1974-1975	19.6
1976	22.2
1977-1978	17.1

Sources: 1952-1961 -- United Nations 1965 (p. 19); Thakur 1960-61 (p. 11); Vaidyanathan and Gaige 1973 (p. 284).
 1961 -- Gubhaju 1975; Krotki and Thakur 1971 (p. 87); Ramchandran 1969 (p. 51).
 1971 -- Central Bureau of Statistics 1974 (p. 9).
 1974-1975 -- Central Bureau of Statistics, May 1976.
 1976 -- Central Bureau of Statistics, February 1977.
 1977-1978 -- Central Bureau of Statistics, July 1978.

¹The crude death rate is defined as the number of deaths that occur in a given year per 1,000 population.

Despite the gradual decline in death rates in recent years, this table shows that the most recent death rate for Nepal, 17.1, still represents one of the highest in Asia. Nepal has a long way to go to achieve satisfactory health standards for her people.

Infant Mortality Rates

Infants under one year of age are subject to a much greater risk of death than other age groups except for the older age groups. The infant mortality rate is a reasonably sensitive indicator of the overall health conditions in a country. Like the CDR, infant mortality rates are also estimated by applying indirect techniques to data for different periods of time from different sources.

Though Table 1.5 shows a picture of high infant mortality in Nepal, there are no reliable data to ascertain the major causes of such high infant mortality. It is generally suspected that most of the deaths in infancy and early childhood may be due to malnutrition, intestinal parasites, diarrheal diseases, and respiratory infections.

Table 1.5 Estimated Infant Mortality Rates,
Nepal, 1965-1978

<u>Time Period</u>	<u>Estimated IMR¹</u>
1965-1966	130-208
1971	172
1974-1975	133
1976(a)	134
1976(b)	152
1977-1978	104

Sources: 1965-1966 -- Worth and Shah 1969.
 1971 -- Central Bureau of Statistics
 1974 (p.12).
 1974-1975 -- Central Bureau of Statistics,
 May 1976.
 1976(a) -- Central Bureau of Statistics,
 February 1977.
 1976(b) -- Nepal Fertility Survey 1976.
 1977-1978 -- Central Bureau of Statistics,
 July 1978.

¹The infant mortality rate is defined as the number of deaths of children less than one year old in a given year per 1,000 births that occur in the same year.

Population Growth and Family Planning

The first official recorded population census was conducted in 1911. Thereafter, a population census was carried out every ten years. Although the first census was carried out in 1911, population censuses

have been carried out on a scientific and systematic basis only since 1952/54. During the period 1911 to 1930, the total recorded population decreased. Sharp increases in population appear to have taken place only since 1941. The total recorded population in different population censuses is given in Table 1.6.

Table 1.6 Population Growth of Nepal Since 1911

Census Year	Total Population	Intercensal Increase	Percentage Increase	Average Annual Growth Rate
1911	5,638,749	-	-	-
1920	5,573,788	64,961	-1.2	-0.1
1930	5,532,574	41,214	-0.7	-0.1
1941	6,283,649	751,075	13.6	1.1
1952/53	8,256,625	1,972,976	31.4	2.5
1961	9,412,996	1,156,371	14.0	1.7
1971	11,555,983	2,142,987	22.8	2.1
1981 ¹	15,020,451	3,464,468	30.0	2.66

¹Preliminary figures. Additional preliminary data from the 1981 census are given in Appendix 1.

It can be seen from the table that over the period of 19 years, i.e., from 1952/54 to 1971, the average annual rate of population growth was 1.7 percent for the period 1952 to 1961, but it increased to 2.1 percent during the period 1961 to 1971. The most recent data from the 1981 census¹ indicate that the rate of population growth in Nepal reached 2.7 percent from 1971 to 1981. If this rate of increase continues, then the population of Nepal will double in less than 30 years.

¹Preliminary census figures for the 1981 population by district are given in Appendix 1.

The Family Planning Programme in Nepal

Historical Background

The family planning movement in Nepal was initiated in 1958 by the Nepal Medical Association and some social workers. With the help of the medical association, in collaboration with the Pathfinder Fund, a voluntary organization, the Family Planning Association of Nepal, was established in the same year. From then on information, education, and family planning services were provided to a limited population in and around the Kathmandu Valley. At present, under the dynamic leadership of HRH Princess Prekshya Rajjya Laxmi Devi Shah the Family Planning Association of Nepal is active in the fields of information, education, communication, training and service delivery of family planning in many districts of the Kingdom.

In 1965, the late King Mahendra Bir Bikram Saha said in his annual speech to the Rastriya Panchayat (National Assembly), "In order to bring an equilibrium between population growth and economic output of the Country, my government has adopted a family planning policy." Since then the Maternal and Child Health section of the Department of Health of His Majesty's Government (HMG) has offered family planning services in limited areas in Nepal.

In November 1968, HMG created a semiautonomous board called the Nepal Family Planning and Maternal Child Health Board. Under the board, the Nepal FP/MCH Project was established. Initially the chairman of the Board was the Honorable Minister for Health, and other members of the Board were the secretaries of the health, education, and finance ministries. After a few years, the Board was chaired by the Director-General of the Health Department, with representatives from the health, education, and finance ministries as members of the Board. The Project Chief acted as a member-cum-secretary of the Board in both stages.

In 1978 the FP/MCH Board was reorganized with the Honorable Minister for Health as chairman and representation from the Honorable members of

the Rastriya Panchayat (the legislative assembly), National Planning Commission, Social Service Coordinating Council, and Ministry of Health. The Project Chief of the FP/MCH Project acts as the member secretary to the Board.

FP/MCH Board's Policy

Some of the noteworthy policies of the Board are as follows:

- The scarcity of medical personnel makes the delivery of health and family planning services extremely difficult. Hence the Board adopted a policy for training locally recruited health aides.
- The Board adopted a policy of using paramedical staff to deliver contraceptives and MCH services.
- The Board approved a policy of providing antenatal and postnatal services to mothers and immunization services (such as BCG, smallpox, DPT, and polio) to children below 5 years of age.
- The Board approved a policy of carrying out research activities such as KAP (knowledge-attitude-practice), mortality, and fertility baseline surveys as evaluation tools of family planning activities during the Fourth and Fifth Five-year Plans.

The FP/MCH Project has four regional offices situated in Dharan, Kathmandu, Pokhara, and Nepalganj. There are 40 district FP/MCH offices, which carry out the national programme set out by the Board in 52 of the 75 districts of the Kingdom. The Community Health and Integrated Project (ICHSDP) is responsible for providing family planning services in the rest of the 23 districts.

Goal of FP/MCH Services

The Fourth Five-year Plan stated that "the ultimate goal of FP/MCH Project is to bring about a balance of the various resources and population growth in order to improve the quality of human life." In order to realize this balance, the plan further stated that the population of Nepal must be limited to a level of 16 to 22 million.

In order to fulfill the above goal, the Project put forward its target of offering family planning services to 15 percent of married couples. The target was revised to 13 percent on the basis of the midterm evaluation. However, the project surpassed this target, reaching 15 percent of married couples.

For the first time realistic demographic targets were set up in the Fifth Five-year Plan. The targets were:

- to reduce the crude birth rate from 40 to 38 per thousand population and
- to reduce the infant mortality rate from 200 to 150 per thousand live births during the plan period.

Demographic calculations indicated that these targets could be achieved by preventing 13,000 births each year, which required 65,000 effective contraceptive users.² The contraceptive mix offered by the Project was adjusted in order to fulfill the above goal.

During the Sixth Five-year Plan, the FP/MCH Project set its target to reduce the total fertility rate by 0.5, that is, from 6.3 to 5.8. The estimates for the contraceptive mix that would be necessary to attain this target are shown in Table 1.7. After preliminary figures for the 1981 census showed that the intercensal growth rate was 2.66, the target for sterilization for fiscal year 1982-1983 was increased to 65,000, in order to curb the high rate of population growth. An increase of similar magnitude is also expected for the remaining two years of the Sixth Plan period.

²These effective users were assumed to use contraception throughout a year, making the number of effective users synonymous with the couple-years of protection (CYP). Women who accepted in one year and continued to use it in the following year are not included in the target figure for that next year.

Table 1.7 Targets of the Nepal FP/MCH Project for Acceptors of Family Planning Methods for the Sixth Five-Year Plan, 1980-1985

<u>Fiscal Year</u>	<u>Temporary Methods</u>	<u>Sterilization</u>	<u>Total</u>
1980 - 81	110,000	40,000	150,000
1981 - 82	120,000	40,000	160,000
1982 - 83	150,000	40,000*	190,000
1983 - 84	160,000	40,000	200,000
1984 - 85	160,000	40,000	200,000
Total	700,000	200,000	900,000

*Recently the 1982-83 target for sterilization acceptors was increased to 65,000. It is now expected that sterilization targets in the remaining years of the plan will also be increased and that targets for temporary methods may be reduced accordingly.

The Family Planning Delivery System

The Nepal FP/MCH Project is the principal agency for family planning and maternal child health at the national level. It provides services through clinics and field delivery. The clinics are presumed to serve an average area of three miles, but the actual area served depends on the geographical location of the clinic. Most of the clinics and district offices of the FP/MCH Project are located in the government's health centers, health posts, and hospitals, or nearby these facilities.

The FP/MCH Project also organizes mobile camps by district. Medical teams visit various areas during the dry season to perform male and female (minilaparotomy and laparoscopy) sterilizations. More camps are held in the Terai than the Hill and Mountain regions. Since persons seeking this service may live some distance from the site of the camp, family planning officers arrange transportation for clients from their area.

Besides the clinics, panchayat-based health workers are also providing family planning and MCH services. Their duties related to family planning include distribution of pills and condoms, motivation of couples to use contraception, and organization of camps (identifying clients and making arrangements through the district family planning officer). It is their responsibility to visit all eligible couples and acceptors of temporary methods in their panchayats on a regular basis. They also do follow-up of clients after sterilization.

The Integrated Community Health Services Delivery Project (ICHSDP) also provides similar services through family planning centers located in health posts and hospitals. Village health workers extend the service network away from the health posts and hospitals. The Family Planning Association of Nepal also has several clinics. Both of these organizations are active in providing minilaparotomy and vasectomy in mobile camps and static facilities in the areas they serve.

Other organizations providing family planning services in limited locations are the Red Cross and community groups such as mothers' clubs, youth clubs, and ex-servicemen's organizations. These organizations make pills and condoms available.

Another component of the delivery system in Nepal is the Contraceptive Retail Sales (CRS) Project. Condoms and pills are distributed to retail stores such as general shops and drugstores for sale to consumers. The project started with distribution in urban areas on a limited basis and recently expanded coverage to most urban areas and a few rural areas.

CHAPTER 2

THE ORGANIZATION OF THE CPS

Introduction

The rationale for conducting the Nepal Contraceptive Prevalence Survey has two components:

- to obtain necessary data on contraceptive behavior for the overall planning and evaluation of the national family planning programme,
- to institutionalize contraceptive prevalence surveys as an adjunctive evaluation tool for increasing the efficiency and effectiveness of the family planning programme.

The main objectives of the NCPS are:

- to determine the knowledge and use of contraceptives as well as their availability in the country,
- to obtain information on the relationships between selected population characteristics and contraceptive practice,
- to obtain information on the best media for diffusing the family planning message among rural people,
- to identify areas where the family planning programme has not yet penetrated,
- to estimate the future demand for family planning and
- to evaluate the effectiveness of the family planning programme, especially after the introduction of panchayat-based workers.

The Nepal Contraceptive Prevalence Survey (NCPS) was conducted by the Nepal Family Planning and Maternal Child Health Project of the Ministry of Health. The Planning, Research, and Evaluation Division (PRE) of FP/MCH has carried out most of the important national and area sample surveys in Nepal in the field of population and family planning, including the World Fertility Survey and the Longitudinal Family Planning and Fertility Survey.

The project agreement signed between His Majesty's Government and Westinghouse Health Systems on October 30, 1980 provided for the collection of national-level data on contraceptive knowledge, use, and availability. The agreement was amended on May 7, 1981 for the collection of additional data in four districts that were recipients of extensive USAID funding and technical support for development projects. This report will focus only on the national-level data collected in the NCPS.

Staffing

The Project Chief of FP/MCH served as National Director and the Chief of the PRE Division acted as Project Director for the Nepal CPS. The National Director dealt mostly with policy and financial issues. Necessary powers to execute the day-to-day activities were delegated by the National Director to the Project Director.

Under the National Director and the Project Director, there were six senior supervisors who had also worked on past surveys and were involved in the different phases of the study.

All of the field supervisors who were selected to work in the NCPS had a master's or equivalent degree in economics or statistics, or commerce. Supervisors were recruited in Kathmandu. Out of 12 supervisors recruited three left the job before training. They were trained and then worked as interviewers during the pretest. One of the senior supervisors acted as a supervisor for one team during the fieldwork.

Sixty interviewers from 12 districts of the country were recruited. Although priority was given to recruiting females, only 18 females participated in the training activities. At the beginning of fieldwork, four female interviewers and one male interviewer left the jobs. Therefore, ten supervisors and 55 interviewers were actively involved during fieldwork. Due to limited time and the lengthy process of recruitment, it was not possible to replace the dropouts. Other staff, such as three senior

accountants (part-time) and four administrative assistants (full-time), worked for the Nepal CPS. A separate supervisor in the central office was assigned to manage the office editing and coding process.

A detailed list of staff is provided in Appendix 2.

Training of Field Staff

The six senior supervisors conducted separate training programs for supervisors and interviewers. Training for supervisors was carried out in Kathmandu before the pretest. Topics covered in training sessions included contraceptive methods, the family planning programme, interviewing techniques, probing techniques, the purpose and value of high quality data, supervision of interviewers, and field management. Intensive practice through role-playing and two days of actual interviewing in nonsample areas were part of the supervisors' training. Additional classes were arranged to familiarize them with the techniques for sub-sampling and field editing of completed questionnaires.

Training for interviewers was conducted simultaneously in four places, Dharan, Pathalैया, Siddhartha Nagar, and Nepalganj. Each of the training centers had one senior supervisor and two supervisors as trainers. During the training of interviewers, techniques of interviewing and probing, were emphasized. A few sessions dealt with contraceptive methods and the family planning programme in Nepal. The duration of interviewers' training was two weeks.

Time Schedule

The planned timetable of the Nepal CPS was watched closely in order to meet the original schedule. However, due to unavoidable circumstances, delays occurred at several stages of the survey. At the very beginning, printing of the questionnaire was delayed. While printing was going on at the FP/MCH Project press, the printing machine broke down. As a result, the fieldwork had to be delayed almost three weeks. Staff took advantage of this situation by giving additional training to interviewers.

Computer editing of the data was hampered severely by shortages of electricity. As tabulations were done in the United States at Westinghouse Health Systems, considerable time passed while materials were sent back and forth between Nepal and the U.S. for review and correction. The remainder of the survey activities were carried out according to the periods mentioned in the schedule shown in Table 2.1.

Budget

It was estimated that the national-level survey would cost about Rs. 1,370,000 (equivalent to U.S. \$115,000). The USAID contribution through Westinghouse Health Systems was about 95 percent, and the rest was borne by His Majesty's Government (HMG) of Nepal. The estimated budget for the district-level survey was Rs. 383,070 (equivalent to U.S. \$32,200).

Table 2.1 NCPS Time Schedule

<u>ACTIVITY</u>	<u>PLANNED DATE</u>	<u>ACTUAL DATE</u>
	<u>1980</u>	<u>1980</u>
1. Questionnaire Design and Translation	Aug. 1-Oct. 31	Aug 1.-Nov. 7
2. Sample Design	Oct. 12-Nov. 6	Oct. 1-Nov. 30
3. Recruitment of Supervisors	Oct. 12-Nov. 6	Oct. 27-Nov. 21
4. Training of Supervisors	Nov. 10-Nov. 21	Nov. 23-Dec. 5
5. Pretest and Finalization of Documents	Nov. 23-Dec. 5	Dec. 6-Dec. 16
		<u>1980-81</u>
6. Printing of Documents	Dec. 7-Dec. 31	Dec. 17-Jan. 24
7. Preparation of Manuals	Oct. 26-Nov. 6	Oct. 15-Nov. 7
8. Recruitment of Interviewers	Oct. 26-Dec. 19	Nov. 23-Jan. 9
	<u>1980-81</u>	
9. Training of Interviewers	Dec. 21-Jan. 3	Dec. 18-Jan. 26
10. Fieldwork	Jan. 4-Apr. 15	Jan. 27-June 22
11. Data Edit Programming	Dec. 15-April 15	May 28-July 10
12. Editing and Coding	April 1-June 14	April 24-July 10
13. Key punching	May 15-June 30	June 5-July 20
14. Editing by Machine	June 1-July 31	June 23-Nov. 6
15. Data Analysis	Aug. 1-Sept. 30	<u>1981-82</u> Nov. 17-June 4
16. Report Writing	Oct. 1-Dec. 31	Nov. 6, 1981- Feb. 28, 1983
	<u>1982</u>	<u>1983</u>
17. Report Printing	Jan. 1-Feb. 28	March 20-April 1
18. Seminar	Apr. 27, 28	June

CHAPTER 3

METHODOLOGY

General Description

To estimate different fertility and family planning parameters at the national, regional (Hill, Terai, and Mountains), and urban-rural levels, it was decided that about 5,500 households would be surveyed with the urban-rural split of 1,000 and 4,500 households, respectively. As the proportion of the urban population in Nepal is rather low (about 5 percent), urban areas were oversampled by a factor of five (in comparison to the rural areas) to arrive at the desired sample size. Previous experience in similar surveys carried out by FP/MCH had shown that on the average about 1.1 eligible respondents have been interviewed per household. Thus, it was expected that about 1,100 eligible women in urban areas and about 4,950 eligible respondents in rural areas would be interviewed. In the NCPS sample 1,476 urban and 4,406 rural women were actually interviewed.

A four-stage cluster sampling design was employed, the details of which follow in this chapter. In order to limit the ultimate cluster size to about 35, the total number of ultimate clusters selected was 42 for the urban areas and 136 for the rural sample.

Sampling Frame

Before describing the sample design, a short description of the frame utilized for this purpose would be in order. Three possible frames for this sample design were considered -- census population figures (1971), the midterm population sample survey (1976), and the national referendum list (1979). However, as the constitutional amendment of 1976 brought about considerable changes in the boundaries of the districts and changes in the panchayat boundaries were enormous (the number of panchayats before 1976 was decreased by about 1,000 with the amalgamation of a substantial number of panchayats), the possibility of utilizing the 1971 census data was ruled out. After similar discussions

on the two other existing frames, it was decided to use both of these for our purposes. Estimates of households by district from the 1976 midterm census were used for the first stage of selection. For subsequent stages of selection, that is, for panchayats and wards, the figures from the 1979 referendum list were used. Although it was felt that omissions and overcounting, which might have taken place in the household list of 1979, might increase the sampling errors, nevertheless it was decided that its use would provide some estimates for the measures of size and that it would help in controlling the final sample size.

Stratification

In this survey urban-rural stratification is explicit, and two independent selections have been made to represent these areas. Regional stratification has been taken care of implicitly in the selection of districts at the first stage. In other words, districts were selected from a list where the Terai districts were listed first, followed by the Hill districts, and finally the Mountain districts.

Selection of the Rural Sample

First Stage of Selection

First, all of the 75 districts of the Kingdom were arranged in a serpentine order (from east to west) so as to ensure enough cases for the regional estimates. From this arranged list 33 districts were selected systematically with probability proportional to their sizes (sizes according to the 1976 midterm population survey). Thus the probability of selecting a district P_i is defined as:

$$P_i = \frac{33A_i}{2465368}$$

where A_i is the number of households in the district i according to the midterm population survey and the divisor is the systematic selection interval.

Second Stage of Selection

In the second stage of selection, urban town panchayats from the selected districts were deleted, and the remaining panchayats were arranged alphabetically. From this ordered list, two panchayats were selected systematically with probability proportional to their sizes. Thus, the conditional probability of selecting a panchayat from the district (P_i) already selected is defined as follows:

$$P_{ij} = \frac{2B_{ij}}{A_i^*}$$

where B_{ij} is the size of the selected panchayat j (1979 referendum) and A_i is the size of the rural population of the selected district i (1979 referendum list).

Third Stage of Selection

First, wards from the panchayats already selected were ordered according to their sizes. Then if the size of a ward was less than 35, it was joined with the ward immediately above it on the list. Instead of using the actual ward sizes, each ward size was divided by 35 for a relative measure and then rounded to the nearest integer. Then two wards were selected systematically with probability proportional to their relative sizes. It should be noted, however, that in four of the panchayats three wards were selected instead of two because wards with less than 35 households were joined with another ward. The conditional probability of selecting a ward k in the selected panchayat j , which itself was selected from the district i , is given by the following equation:

$$P_{ijk} = \frac{2W_{ijk}}{B_{ij}^{**}}$$

where W_{ijk} is the population size of the ward according to the 1979 referendum list divided by 35 and rounded to the nearest integer, and B_{ij}^{**} is the relative size of the village panchayat obtained from the summation of the W_{ijk} 's over the village panchayat j in the district i .

Fourth Stage of Selection

A list of household heads in the selected wards was made by the survey team before the respondents were selected. In preparing the list of household heads the survey team supervisors were instructed to check carefully about the boundaries of the wards and the number of households. Although the referendum figures were supplied to them as a crude measure of ward size, supervisors were instructed to check their household listing with the ward chairman, ward members, and local leaders to ensure that the survey listing was complete. During the course of fieldwork our listing sometimes differed substantially from the sample frame figures. After the list was completed, a systematic selection was made with a probability that ensured a self-weighting rural sample. Calculation of the final probability of selection (S_{ijk}) was based on the following formula:

$$S_{ijk} = \frac{1}{555 P_i P_{ij} P_{ijk}}$$

The sampling probabilities for the districts, panchayats, and wards in the rural sample are given in Appendix 3.

Selection of the Urban Sample

As mentioned earlier, the urban population was oversampled by a factor of five. The sample design for the urban population was basically similar to the rural population; however, for clarity a concise description of each of the stages is given below.

First Stage of Selection

The selection of the districts followed the procedure outlined earlier for the rural sample exactly. Any urban areas (town panchayats) that fell within the selected districts were taken to be totally self-representing. In other words the selection probability of urban areas within a district was unity. Twelve districts had only one urban area and one district had two, but the remaining 20 districts had no urban

area at all. Thus, altogether 14 town panchayats were selected. This procedure for selecting district and town panchayats can be thought of as a straightforward one-stage selection of town panchayats only in the urban stratum with probabilities proportional to their sizes based on the following formula:

$$P_{ij} = \frac{M_{ij}/P_i}{\sum (M_{ij}/P_i)}$$

where M_i represents the number of households in the town panchayat j corresponding to the selected district i and P_i is the probability of selecting district i .

Second Stage of Selection

Following selection methods similar to that employed for the rural sample, three wards were selected. The selection probability, P_{ijk} , is given by:

$$P_{ijk} = \frac{3 W_{ijk}}{T_{ij}}$$

where W_{ijk} is the size of the ward according to the 1979 referendum list divided by 35 and rounded to the nearest integer and T_{ij} is the relative size of the town panchayat obtained from the summation of W_{ijk} 's over the town panchayat j in the district i .

Third Stage of Selection

After the NCPS field staff listed the selected wards, individual households were selected using a probability that ensured self-weighting within the urban strata. The probability of selection was calculated using the following formula:

$$S_{ijk} = \frac{1}{111 \times \frac{M_{ij}/P_i}{\sum (M_{ij}/P_i)} \times P_{ijk}}$$

The sampling probabilities for districts, panchayats, and wards in the urban sample appear in Appendix 4. Figure 3.1 shows the location of the urban and rural panchayats in the selected districts.

Sample Weight

Although each selection in the rural and urban areas was self-weighting, weights need to be used for the national estimates: 1.259 for the rural areas and 0.227 for the urban areas.

Questionnaire Design

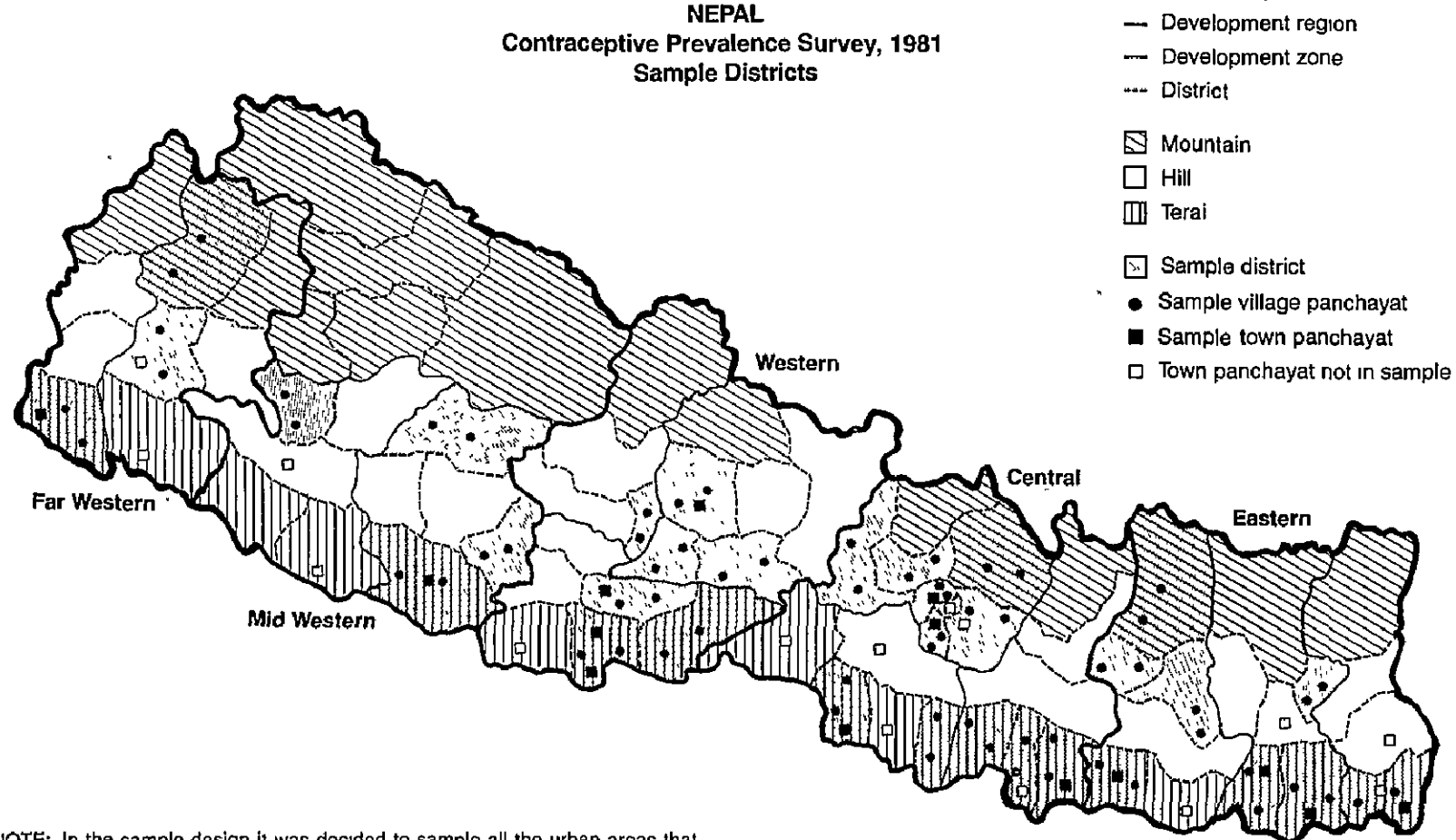
The major objective of the Contraceptive Prevalence Survey was to collect information regarding various aspects of contraception in Nepal to help programme managers evaluate and monitor the ongoing family planning programme. The questionnaire was designed to be straightforward, simple, and precoded, with a minimum number of questions, so that the necessary data regarding the following topics could be obtained:

- Eligibility and socioeconomic characteristics
 - Fertility behavior
 - Future fertility intentions
 - Knowledge of contraception
- 1) Prompted
 - 2) Unprompted
- Current use of contraception
 - Past use of contraception
 - Side effects of contraception
 - Future use of contraception
 - Availability of contraception
 - Reasons for not using contraception

The design of the questionnaire followed the core questionnaire proposed by Westinghouse Health Systems. However, this schedule was modified to suit Nepal's needs. Some further changes were made in the questionnaire after pretesting was carried out, the details of which are mentioned in sections that follow on pretesting and fieldwork. The English translation of the final version of the questionnaire has been put in Appendix 5 of this report.

Figure 3.1

NEPAL
Contraceptive Prevalence Survey, 1981
Sample Districts



NOTE: In the sample design it was decided to sample all the urban areas that happen to be in the selected districts. However, the town panchayats in the Doti, Kabhre, Mahottary and Jhapa districts could not be included, as these were declared town panchayats after the fieldwork was over. These town panchayats are indicated by the white box symbol inside sample districts.

Pretesting the Questionnaire

During translation of the CPS core questionnaire into Nepali, a few changes were made to reflect Nepalese culture and values and to meet the country's objectives for the survey.

After translation, the questionnaire was pretested on a sample of 110 women in two districts using 11 field supervisors. These two districts (Kalaiya from the Terai and Makwanpur from the Hills) were selected with language problems in mind, for in most Terai districts some local languages (especially Maithali, Bhojpuri, and Tharu) are widely spoken, and in some areas people are even unable to communicate in Nepali. In the same way, the rationale to select a Hill district was that respondents may not be able to understand the questions clearly because words and phrases may have different meanings in local dialects such as Tharu, Gurung, Magar, Limbu, and so on.

Immediately after the pretest, a one-day language seminar was held in Kathmandu for the purpose of improving the comprehensibility of the questions to respondents. This seminar was attended by about 40 participants, including demographers, anthropologists, linguists, and other social scientists. The NCPS staff felt that the seminar played an important role in the improvement of the questionnaire, especially in the wording and structure of sentences.

On the basis of the experience in Kalaiya and Makwanpur districts and the discussion in the language seminar, a few modifications to the questionnaire were made. The important changes were:

- Omission of the question "Are they your own children?" Experience showed that most of the respondents felt offended and were less interested in the interview, and in some cases, they were even reluctant to continue the interview after being asked this question. Instead, it was agreed to use the question "We have written the total number of live births you have had as.... Is it right?" The above question could then be deleted.
- The omission of abstinence as a method of birth control from the table of knowledge and use of contraceptives. Again, it was agreed that this method was covered by the heading "other" in the same table.

Apart from these changes, other minor modifications in some words and phrases were also made in order to make them clearer and more understandable to the respondents without changing the main idea of the questions.

Fieldwork

NCPS fieldwork started in the third week of January 1981 and finished in the middle of June 1981. Provision was made for 12 survey teams, each composed of one supervisor and five interviewers. Since some field supervisors and interviewers dropped out before fieldwork started, there were actually ten teams.

The ratio of supervisor to interviewers was 1:10, 1:8, 1:4, and 1:3 in four teams and 1:5 in the remaining six teams. These ratios differed because two supervisors who dropped out could not be replaced, since the time consumed by their training would delay fieldwork. The Rupandehi and Kaski survey teams were merged into one, forming the supervisor to interviewer ratio of 1:10. In the same way the Mahendra Nagar and Dailekh teams were also merged into one, but here the ratio came to be 1:8 because two interviewers on the Dailekh team dropped out before fieldwork started. Similarly the ratio 1:4 and 1:3 resulted when one interviewer in Dharan and two interviewers on the Gorkha team dropped out.

In six teams working in the Terai and some Hill districts (with transportation facilities), there were female interviewers as well as male interviewers. In another four teams working in Hill districts (without any transportation facilities), there were only male interviewers. The arduous nature of fieldwork in such areas makes it difficult to employ female workers. Even if they are recruited, there are always higher chances of their dropping out. For example, two female interviewers recruited for the Dailekh team dropped out just before the start of fieldwork.

In the field, each team either prepared their food by themselves or hired local people at their own expense. Lodging was provided either by village panchayat members or by local leaders.

Before starting the actual fieldwork, teams were helped by the local ward (the smallest political unit) chairman or members to determine the boundaries of the sample points (wards). Then the household listing was done. The total number of households was found to vary up and down from those of the referendum household listing.

The NCPS senior staff felt that supervision was the most important activity to collect high quality data. Therefore each supervisor made spotchecks, surprise visits, and so on to ensure the quality of data. The supervisor also checked completed questionnaires the same day as the interview or the next day. On finding any mistake or other irregularities, he would instruct the interviewer who did the interview to go back to the household and correct the questionnaire by asking the appropriate questions and using probe questions if necessary.

Quality control of fieldwork was also maintained through the use of control sheets by interviewers and supervisors (sample sheets are provided in Appendices 6 and 7). Information on work assignments and outcomes were kept to ensure that work was being completed efficiently and that no eligible respondent was missed.

A higher level of supervision was provided by senior supervisors, who visited each team at least once. Movement of teams in the field was tracked in the central office by cable messages sent by field supervisors before leaving one sample point and starting for another. Senior supervisory visits were scheduled on the basis of this information. Many of the teams were visited by senior supervisors two or three times to check work, answer questions, and bring materials or money.

Apart from this, the Project Director and country monitors from Westinghouse Health Systems also visited a few sample points. Out of 33 sample districts 18 were visited by NCPS staff from the central office.

Data Processing

The flow of work in this stage of the survey is illustrated in Figure 3.2 and described below.

Office Editing

Field editing of the questionnaires was done by supervisors the same day that the interviews were done. Office editing of questionnaires in the central office was done by five regular coders of FP/MCH under the supervision of the senior supervisors and the statistician. Checks on completeness, proper flow according to skip instructions, and birth intervals were made during office editing, since these checks could not be done in proper detail in the field edit. Necessary corrections were made without distortion of data, and no imputations that might impair the data quality were done.

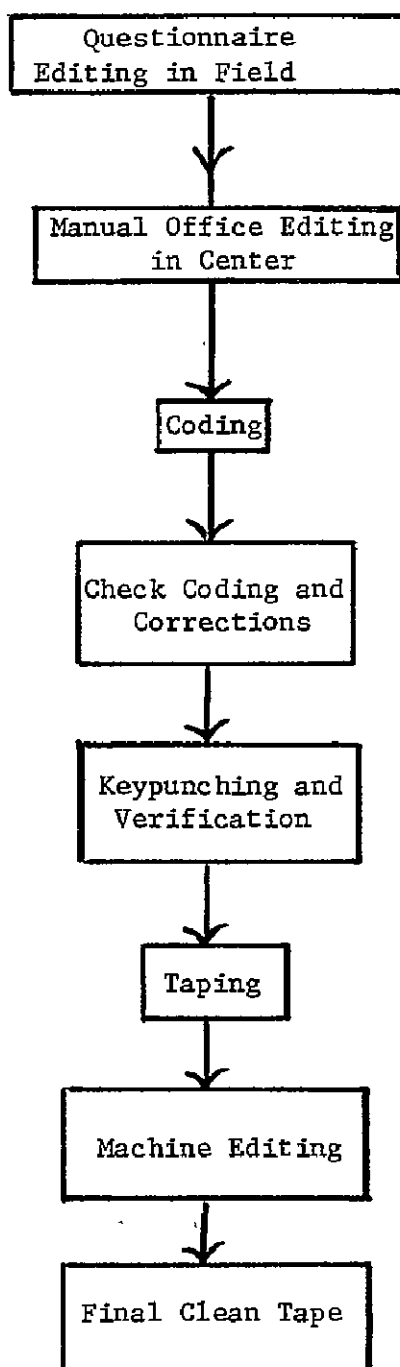
Coding

The edited questionnaires were then coded by about 30 assistants. Half of these assistants were regular coders of the FP/MCH Project. Four days of intensive training in coding were given to the coders by the Project Director and senior staff. Only those coders who performed satisfactorily in the training were chosen as coders. As the questionnaire was in a precoded format, the job was done with ease. Even then, only ten questionnaires were given to each coder every day to improve the quality of coding.

Code Checking

All of the coded questionnaires were checked by five of the best coders, and necessary corrections were made. On the average, only one

Figure 3.2 Flow Chart of NCPS Data Processing



error in every three coded questionnaires was found on checking. A record was kept on each coder's performance (see Appendix 8). Sample checks on the checked questionnaires were done by senior NCPS staff.

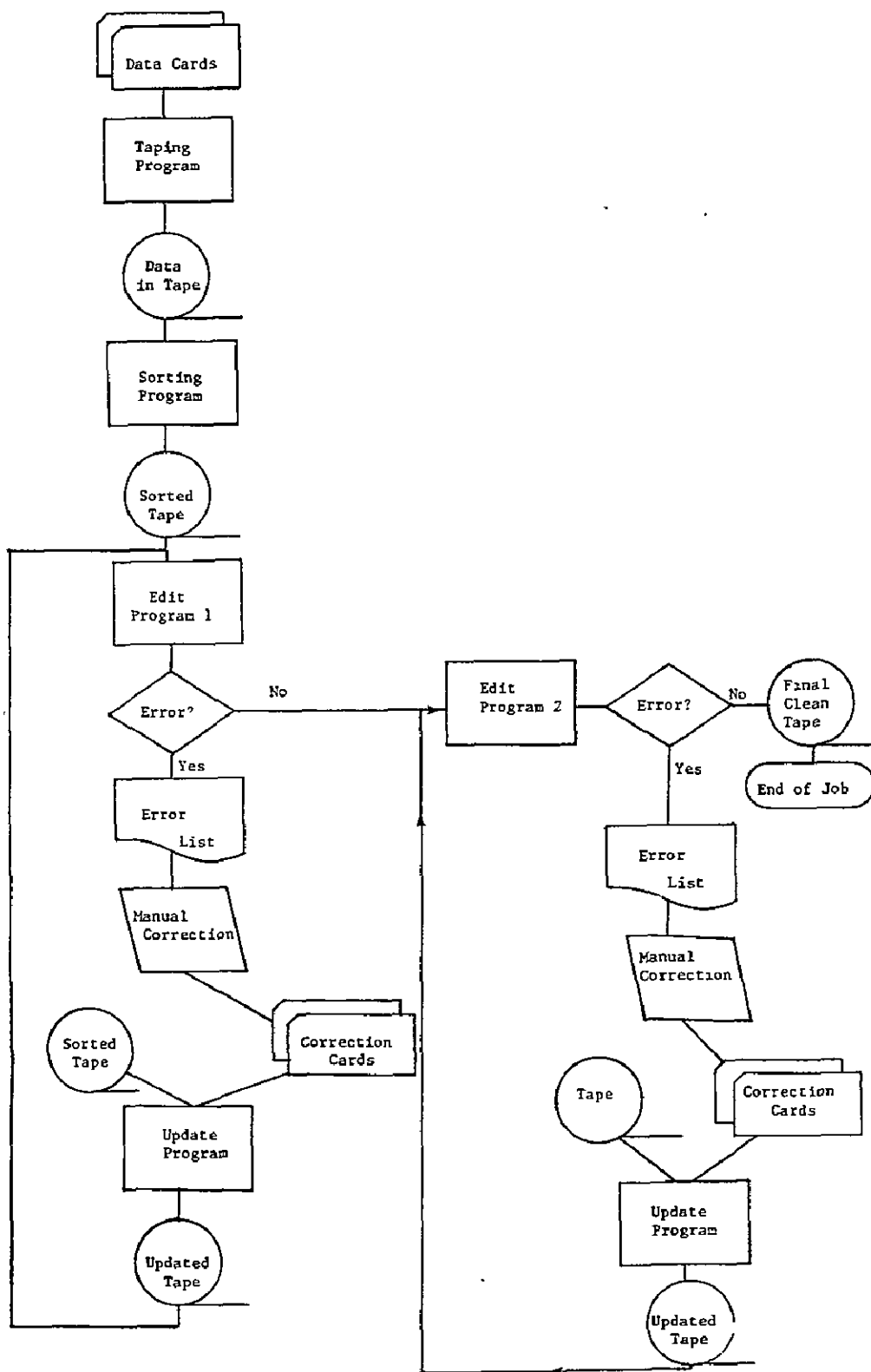
Machine Editing

Extensive checks on value ranges, skip patterns, and response consistency were done by two editing programs. A third program updated the data with correction cards. Figure 3.3 shows the steps involved in the computer editing stage. Hardly any mistake went unnoticed due to those rigorous checks on the data. Checks on structure, that is, completeness of all cards and the order of the cards for each questionnaire, were also done by the programs. Almost 10 percent of the total number of cards had to be corrected due to errors of some kind. The rather high level of errors seemed to occur for two reasons. First, certain boxes in the questionnaire were inadvertently not printed, so that codes were punched in the wrong columns. (For example, the box for column 26 in card type 1 was not printed legibly in many of the questionnaires). Second, the use of blanks as valid codes led to keypunching problems in many cases when the number of blank spaces was not counted accurately. Corrections after the computer editing were done by the senior supervisors, statistician, and the Project Director.

Data Tabulations

For data tabulations the clean data tape was sent to Westinghouse Health Systems. The limited computer facilities in Nepal necessitated data processing outside the country. There the data were further checked for internal consistency. Minor inconsistencies were corrected with the help of information provided by the FP/MCH Project. A statistician/programmer from the FP/MCH Project visited Westinghouse Health Systems for about two weeks to work on the data tabulations. As soon as additional tabulations were run at Westinghouse Health Systems, they were sent to Nepal in different batches to be analyzed for report writing.

Figure 3.3 System for Cleaning Data



Report Writing

Report writing was a collaborative effort, and a first draft of the report was prepared at the FP/MCH Project. After the first draft was complete, two officers from the FP/MCH Project went to Westinghouse Health Systems for two weeks to work further on the draft report with the consultants. At this stage some more tabulations were made and incorporated into the report.

Report Printing

Report printing was done by Westinghouse Health Systems in the month of March 1983. Then the printed reports were sent to Nepal for disseminating the survey findings to officials of His Majesty's Government and organizations concerned with population and development.

CHAPTER 4
CHARACTERISTICS OF THE RESPONDENTS

In the Nepal Contraceptive Prevalence Survey, 5,880 of the 5,924 eligible currently married women in the sample were interviewed. The response rate was 99.2 percent.

The socio-demographic characteristics of those women interviewed are presented in this chapter. Table 4.1 compares the age distribution of women interviewed in the NCPS with those interviewed in the 1976 Nepal Fertility Survey. The mean age for all NCPS respondents was 30.64. The modal age group was 25-29, the age group for 22 percent of all respondents. The mean age of respondents for the Nepal Fertility Survey was 30.06, slightly lower than the NCPS.

Table 4.1 Age Distribution of Currently Married Women 15-49 for NCPS 1981 and NFS 1976

<u>Age</u>	<u>NCPS 1981</u>		<u>NFS 1976</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
15 - 19	616	10.5	741	13.5
20 - 24	1,217	20.7	1,189	21.6
25 - 29	1,276	21.7	1,106	20.1
30 - 34	997	17.0	814	14.8
35 - 39	754	12.8	658	12.0
40 - 44	610	10.4	610	11.1
45 - 49	411	7.0	383	7.0
Total	5,881	100.0	5,501	100.0
Mean (Years)	30.64	-	30.06	-

Notes: 1. Percents may not add to 100 exactly due to rounding.
2. NFS data are weighted.

Table 4.2 shows the basic distributions for a number of background variables which will be used extensively in this report. The first three variables describe the distribution of population by geographic area. In the analysis that follows the urban-rural differential will be among the most significant in most cases. However, it is important to note that Nepal is, for all practicable purposes, a rural country with only 5.7 percent of its population in urban areas. For this reason significant urban-rural differentials must be considered in light of the rural nature of the population. The remaining variables in Table 4.2 cover respondent or spouse characteristics. These variables reaffirm the primarily rural character of Nepal: women are largely illiterate (93 percent) and while their husbands are less so (56 percent), the overall level of educational attainment is low; and although more than half of the women interviewed work (55 percent), most work as agricultural laborers (81 percent of those working women were in agriculture).

The age distributions by development region, geographic region, and urban-rural residence are shown separately in Tables 4.3, 4.4, and 4.5, respectively. There is some difference in the mean age of respondents by development region. The highest mean age is 31.05 years in the Central development region, and the lowest is 29.19 years, in the Far Western development region. Table 4.4 shows that women from the Mountain region had the highest mean age (31.07), which is almost one year more than the lowest mean age (30.13 years), found in the Terai. Table 4.5 does not show any marked difference in mean age between respondents from urban (30.78 years) and rural areas (30.48 years). However, a slightly higher proportion of respondents less than 25 years old were found in rural rather than urban areas.

Educational attainment of respondents shows that 93 percent are illiterate (Table 4.2). Educational attainment by development region, geographic region, and residence were tabulated to study the differentials for these variables. Table 4.6 shows that the level of illiteracy exceeds 90 percent in all of the development regions. The highest levels of illiteracy (over 96 percent) are found for respondents in the Mid Western and Far Western development regions.

Table 4.2 Distribution of Currently Married Women 15-49 Years on Selected Characteristics, Nepal 1981

Characteristic	Number	Percent
<u>Geographic Region</u>		
Mountain	462	7.9
Hill	2,473	42.1
Terai	2,945	50.1
Total	5,880	100.1
<u>Type of Residence</u>		
Urban	335	5.7
Rural	5,544	94.3
Total	5,879 ¹	100.0
<u>Development Region</u>		
Eastern	1,244	21.2
Central	1,967	33.5
Western	1,194	20.3
Mid Western	656	11.2
Far Western	818	13.9
Total	5,879 ¹	100.1
<u>Education</u> ³		
Illiterate	5,447	92.7
Literate	149	2.5
Primary	110	1.9
Middle, Secondary	125	2.1
Completed Secondary	43	0.7
Total	5,874 ²	99.9
<u>Husband's Education</u> ³		
Illiterate	3,279	56.1
Literate	1,049	18.0
Primary	516	8.8
Middle, Secondary	706	12.1
Completed Secondary	290	5.0
Total	5,840 ²	100.0
<u>Working Status</u>		
Working	3,216	54.8
Not Working	2,656	45.2
Total	5,872 ²	100.0
<u>Occupation</u>		
Agriculture	2,619	44.6
Non-agriculture	597	10.2
Not Working	2,656	45.2
Total	5,873 ²	100.0

¹ Total may differ slightly from the total sample size of 5,880 due to weighting.

² Cases with missing data for the characteristic are excluded.

³ The interpretation of the education categories is as follows: illiterate, cannot read or write; literate, can read and write but did not have formal schooling, or completed less than four years of school and can read and write; primary, completed four or five years; middle, secondary, completed six through ten years; completed secondary, passed school leaving certificate (SLC) examination.

Table 4.3 Age Distribution of Currently Married Women 15-49 by Development Region, Nepal, 1981

<u>Age</u>	<u>Development Region</u>				
	<u>Eastern</u>	<u>Central</u>	<u>Western</u>	<u>Mid Western</u>	<u>Far Western</u>
15 - 19	8.7	9.5	11.1	9.7	15.4
20 - 24	20.1	19.0	21.0	23.3	23.0
25 - 29	23.7	22.1	19.4	22.6	20.3
30 - 34	18.0	16.5	17.1	16.8	16.4
35 - 39	12.6	13.7	13.1	15.3	8.7
40 - 44	8.8	11.8	11.6	7.2	10.1
45 - 59	8.1	7.5	6.6	5.1	6.2
Total (N)	1,244	1,968	1,194	656	818
Mean (Years)	30.73	31.05	30.54	29.80	29.19

Table 4.4 Age Distribution of Currently Married Women 15-49 by Geographic Region, Nepal, 1981

<u>Age</u>	<u>Region</u>		
	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>
15 - 19	8.4	10.6	10.7
20 - 24	21.0	20.7	20.6
25 - 29	23.7	19.8	23.0
30 - 34	15.5	16.4	17.7
35 - 39	10.1	13.5	12.7
40 - 44	12.3	11.2	9.4
45 - 49	9.0	7.8	6.0
Total (N)	462	2,473	2,945
Mean (Years)	31.07	30.79	30.13

Table 4.5 Age Distribution of Currently Married Women 15-49
by Type of Residence, Nepal, 1981

<u>Age</u>	<u>Residence</u>	
	<u>Urban</u>	<u>Rural</u>
15 - 19	8.5	10.6
20 - 24	19.7	20.7
25 - 29	23.9	21.6
30 - 34	16.9	17.0
35 - 39	13.8	12.8
40 - 44	9.9	10.4
45 - 49	7.2	7.0
Total (N)	335	5,545
Mean (Years)	30.78	30.48

Table 4.6 Percent Distribution of Currently Married Women 15-49 Years
of Age by Level of Completed Education and Development
Region, Nepal, 1981

<u>Education</u>	<u>Development Region</u>				
	<u>Eastern</u>	<u>Central</u>	<u>Western</u>	<u>Mid Western</u>	<u>Far Western</u>
Illiterate	91.8	92.2	90.3	96.3	96.1
Literate	3.2	2.4	4.0	0.8	1.2
Primary	1.9	2.0	2.3	1.1	1.3
Middle, Secondary	2.5	2.4	2.4	1.1	1.2
Completed Secondary	0.6	1.0	0.9	0.8	0.2
Total (N)	1,244	1,965	1,193	656	818

Table 4.7 shows educational attainment by geographic region. The highest proportion of illiterate respondents is found in the Mountain region (98 percent), compared to 92 percent in both the Hill and Terai regions.

Table 4.7 Percent Distribution of Currently Married Women 15-49 Years of Age by Level of Completed Education and Geographic Region, Nepal, 1981

<u>Education</u>	<u>Region</u>		
	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>
Illiterate	97.8	92.4	92.2
Literate	1.4	3.3	2.1
Primary	0.3	1.5	2.4
Middle, Secondary	0.5	2.0	2.5
Completed Secondary	0.0	0.8	0.8
Total (N)	462	2,470	2,944

With regard to education, Nepal follows a typical path of socio-economic development in which urban areas tend to benefit from development before rural areas. As Table 4.8 indicates, women who live in rural areas are almost one-and-a-half times more likely to be illiterate than urban women (94 percent as against 65 percent). Among those women with some education (that is, all categories other than illiterate in the table), further analysis shows that the proportion of women who have attended school beyond the primary level is higher for urban residents (about 60 percent) than rural residents (about 30 percent). Although the urban-rural differential in education is quite substantial, the small proportion of the population residing in urban areas means that female literacy is still an uncommon characteristic in Nepal.

As the proportion of literates is very low among all respondents, it was deemed important to study the educational attainment of the spouses, too, under the assumption that changes in their educational

Table 4.8 Percent Distribution of Currently Married Women 15-49 Years of Age by Level of Completed Education and Type of Residence, Nepal, 1981

<u>Education</u>	<u>Residence</u>	
	<u>Urban</u>	<u>Rural</u>
Illiterate	65.4	94.4
Literate	7.4	2.2
Primary	6.5	1.6
Middle, Secondary	11.4	1.6
Completed Secondary	9.3	0.2
Total (N)	333	5,542

attainment could influence the fertility behavior of women. In Nepal, men have been exposed to education much more than females. As Table 4.2 shows, 44 percent of the husbands are literate. Among those husbands who have some education, about 40 percent have had schooling beyond the primary level.

As with the respondents themselves, the percent of illiterate husbands was lowest in the Western development region (40 percent) followed by the Eastern development region (54 percent), as shown in Table 4.9. There was a wide range of variation in the levels of illiteracy in the five development regions.

Table 4.10 shows the educational attainment of spouses by geographic region. The proportions illiterate were 50 percent for the Hill region, 60 percent for the Terai region, and 62 percent for the Mountain region. Looking only at those spouses with some education, somewhat larger proportions completed school beyond the primary level in the Hill and Terai regions compared to the Mountain region.

For both husbands and wives, literacy is considerably higher in the urban areas. Table 4.11 shows that 75 percent of urban husbands, but

Table 4.9 Percent Distribution of Currently Married Women 15-49 Years of Age by Husband's Level of Completed Education and Development Region, Nepal, 1981

<u>Husband's Education</u>	<u>Development Region</u>				
	<u>Eastern</u>	<u>Central</u>	<u>Western</u>	<u>Mid Western</u>	<u>Far Western</u>
Illiterate	54.0	60.6	40.5	74.2	57.1
Literate	20.0	13.3	26.4	11.9	18.6
Primary	10.1	7.7	9.8	4.1	11.9
Middle, Secondary	12.1	12.3	16.2	6.4	10.3
Completed Secondary	3.8	6.1	7.1	3.4	2.2
Total (N)	1,241	1,936	1,190	656	818

Table 4.10 Percent Distribution of Currently Married Women 15-49 Years of Age by Husband's Level of Completed Education and Geographic Region, Nepal, 1981

<u>Husband's Education</u>	<u>Region</u>		
	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>
Illiterate	62.4	50.3	60.1
Literate	19.3	23.6	13.0
Primary	10.4	8.5	8.8
Middle, Secondary	7.1	12.3	12.7
Completed Secondary	0.8	5.3	5.3
Total (N)	462	2,465	2,913

only 42 percent of the husbands of rural residents, are literate. Also, in the case of urban husbands with some education, about two-thirds have attended school after the primary level, compared to slightly more than one-third of the husbands of respondents in the rural areas.

Table 4.11 Percent Distribution of Currently Married Women 15-49 Years of Age by Husband's Level of Completed Education and Type of Residence, Nepal, 1981

<u>Husband's Education</u>	<u>Residence</u>	
	<u>Urban</u>	<u>Rural</u>
Illiterate	24.7	58.1
Literate	16.4	18.1
Primary	8.6	8.8
Middle, Secondary	23.4	11.4
Completed Secondary	26.9	3.6
Total (N)	333	5,507

Relationships between Selected Socio-economic and Demographic Variables

In this section relationships between selected socio-economic and demographic variables are presented. This brief analysis is made to alert the reader to the interrelationships among these background factors, which will also be examined in later sections that deal with knowledge and use of family planning.

Table 4.12 shows the educational attainment of respondents by age. Even though the overall percent literate is not high, an inverse relationship between age and educational attainment is evident. Older women are slightly more likely to be illiterate than younger women. This relationship may be due to the fact that awareness of the need for education in general, and female education in particular, is relatively new in Nepal.

It is interesting to note in Table 4.13 that there is less participation of literate women in the labor force (about 32 percent combining all four educated groups) in comparison to illiterate women (57 percent). Although this result is opposite to what might be expected, other data in the survey provide some explanation. First, 95 percent of women who

Table 4.12 Percent Distribution of Currently Married Women 15-49 Years of Age by Age and Level of Completed Education, Nepal, 1981

Age	Education					Total (N)
	<u>Illiterate</u>	<u>Literate</u>	<u>Primary</u>	<u>Middle, Secondary</u>	<u>Completed Secondary</u>	
15 - 19	89.6	2.6	5.0	2.4	0.4	616
20 - 24	89.3	3.9	2.2	3.2	1.4	1,217
25 - 29	91.8	2.9	2.0	2.3	1.0	1,274
30 - 34	93.1	1.9	1.2	2.9	0.9	995
35 - 39	95.5	2.2	1.4	0.7	0.2	754
40 - 44	97.1	1.5	0.5	0.7	0.1	610
45 - 49	97.6	1.1	0.4	0.9	0.0	410

Table 4.13 Percent Distribution of Currently Married Women 15-49 Years of Age by Working Status, Occupation, and Level of Completed Education, Nepal, 1981

<u>Working Status and Occupation</u>	Education				
	<u>Illiterate</u>	<u>Literate</u>	<u>Primary</u>	<u>Middle, Secondary</u>	<u>Completed Secondary</u>
Working	56.6	34.1	33.5	25.5	37.9
Agriculture	46.6	28.1	20.0	15.9	1.0
Non-agriculture	10.0	6.0	13.5	9.6	36.9
Not Working	43.4	65.9	66.5	74.5	62.1
Total (N)	5,441	149	110	125	43

are economically active work in the agricultural sector, the service sector, or as laborers (not shown). None of these occupations requires education. Second, the majority of literate women may not have sufficient education to qualify them for skilled labor and higher-level jobs in the modern sector. Among the 427 literate women, about 60 percent have schooling only up to the middle level (see Table 4.2). As Table 4.13

shows, women who have completed the secondary level or higher participated in the labor force somewhat more often than women with less education (38 percent versus about 31 percent for the other three educated groups). There may be other social and economic factors that influence the observed relationship between education and economic activity, such as family prestige, limited absorptive capacity of the modern-sector labor market in Nepal, or hiring practices for modern-sector jobs. No data on such factors were collected in the NCPS, however, as the survey was designed for another purpose.

The second important result in Table 4.13 is that participation in the agricultural labor force decreases with higher educational attainment. About 47 percent of illiterate women work in agriculture, but this percentage decreases steadily with each successive level of education.

These connections between educational level and employment status are found for both urban and rural women, as Table 4.14 shows. About 80 percent of urban literate women are not economically active outside the home compared to almost 60 percent of urban illiterate women. The percent difference between literate and illiterate women in rural areas is also about 20 percent. However, it should also be noted in Table 4.14 that a higher percentage of rural women (56 percent) are economically active than urban women (36 percent), and rural women are also more likely to be involved in agriculture. As with the relationship between level of education and work status, the reasons for the urban-rural differential in employment are unclear. Social restrictions, lack of economic need, or lack of suitable employment may all explain lower levels of urban employment.

The pattern of economic activity is not any clearer when region of residence is examined (Table 4.15). Women from the Mountains, which is the least developed region, show the highest level of economic activity with the majority working in the agricultural sector. Women living in the Hill region have the lowest level of economic activity and an intermediate level of activity in the agricultural sector. The lowest level

Table 4.14 Percent Distribution of Currently Married Women 15-49 Years by Occupation, Type of Residence, and Educational Status, Nepal 1981

Occupation	Residence and Educational Status ¹					
	Urban			Rural		
	Illiterate	Literate	All	Illiterate	Literate	All
Agriculture	31.4	4.3*	22.0	47.2	25.4	46.0
Non-agriculture	12.6	17.8*	14.4	9.9	10.1	9.9
Not Working	56.0	77.9	63.6	42.9	64.5	44.1
Total (N)	218	115	333	5,223	312	5,535

Notes: *Less than 25 women.

¹The category "literate" includes women who can read and write and those who have attended school for four or more years.

of employment in the agricultural sector (and the highest in the non-agricultural sector) is found among Terai women.

Taken together, the results shown in Tables 4.13, 4.14, and 4.15 suggest two conclusions. First, there are very few opportunities for female employment other than as agricultural laborers. Second, regardless of the occupation, female employment is likely to be in low status positions because employment appears to decrease as social status (indicated by education) improves.

In summary, the NCPS results show that Nepalese women in the reproductive years live mostly in rural settings. More often than not, they are economically active, usually in agriculture. Levels of illiteracy continue to be very high among these women, but strong urban-rural differences exist. Moderate levels of literacy were found for the spouses of respondents, again with noticeably higher levels in urban areas.

Table 4.15 Percent Distribution of Currently Married Women
15-49 Years of Age by Occupation and Geographic
Region, Nepal 1981

<u>Occupation</u>	<u>Region</u>		
	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>
Agriculture	73.3	45.1	39.7
Non-agriculture	4.1	3.5	16.7
Not Working	22.6	51.4	43.6
Total (N)	462	2,467	2,935

Representativeness of the Sample

It is important to assess whether the sample obtained in the NCPS adequately represents the universe of currently married women of child-bearing age in Nepal. Using available data from the NFS, the Midterm Population Sample Survey (MPSS), and preliminary data from the 1981 Census, several comparisons will be presented for the distributions on age, geographic region, development region, literacy, and working status. Although this analysis is very limited, it suggests that the NCPS sample is not widely divergent from the other sources.

Table 4.16 shows that the age structure of currently married women 15-49 years old from the NCPS is fairly close to the results obtained from the NFS and MPSS. However, some small differences in the 15-19, 25-29, and 30-34 year age groups have been observed. These specific differences are most plausibly explained by sampling variation and random error in age reporting for two reasons. First, none of the percentage differences is greater than 4 percent. Second, the NCPS proportions are not consistently larger or smaller than the corresponding figures for the NFS and MPSS.

Table 4.16 Age Distribution of Currently Married Women 15-49
from NCPS 1981, NFS 1976, and Mid-term Population
Sample Survey (MPSS) 1976

	<u>NCPS 1981</u>	<u>NFS 1976</u>	<u>MPSS 1976</u>
<u>Age</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
15 - 19	10.5	13.5	12.3
20 - 24	20.7	21.6	19.7
25 - 29	21.7	20.1	18.6
30 - 34	17.0	14.8	16.6
35 - 39	12.8	12.0	13.6
40 - 44	10.4	11.1	11.4
45 - 49	7.0	7.0	7.8

The regional distributions of the sample compared to the 1981 Census population are shown in Table 4.17. The Terai region seems to be somewhat over-represented in the sample. Similar information for the development regions indicates that the Western development region seems to be over-represented, but that the other four development regions are fairly well represented. It is difficult to attribute the regional variations to a specific reason, but the sampling frame of the NCPS could be a factor. In the NCPS sampling frame, an average number of households per ward was assumed. A review of the actual number of households listed in wards revealed that the assumed figure was exceeded in some wards in the Terai. Therefore, proportionately more households from such wards would have been selected into the survey sample than were expected according to the sampling frame.

Although some differences between the MPSS and NCPS are found in the proportions of married women who are literate and economically active, these differences may reflect improvements in female education and employment during the five-year period (see Table 4.18). The definitions and questions in the interviews for the NCPS and MPSS were very similar

Table 4.17 Percent Distribution of Sample and National Populations by Geographic Region and Development Region from NCPS 1981 and Census 1981

	<u>NCPS 1981¹</u>	<u>Census 1981²</u>
<u>Geographic Region</u>		
Mountain	7.9	8.6
Hill	42.1	47.7
Terai	50.1	43.6
<u>Development Region</u>		
Eastern	21.2	24.7
Central	33.5	32.7
Western	20.3	20.9
Mid Western	11.2	13.0
Far Western	13.9	8.7

¹Currently married women 15-49 years old.

²Census data are not yet available by age, sex, or marital status. Thus, these percentages are for the country as a whole.

Table 4.18 Percent of Women 15-49 Years of Age Who Are Literate and Economically Active from NCPS 1981 and MPSS 1976

	<u>NCPS 1981¹</u>	<u>MPSS 1976</u>
Literate	7.3	4.5 ²
Economically active	54.8	42.6 ¹

¹Currently married women 15-49 years of age.

²All females 15-49 years of age.

for literacy, but there could be some differences in the question wording and the interpretation of responses about economic activity in the two surveys.

These comparative tables indicate that, in terms of representativeness, this study is fairly close to other surveys, as well as the census figures. It is difficult to say precisely how the differences might affect the NCPS findings or why the differences occur. On the whole, the variations are minor and do not appear to require statistical adjustments to the data. In the absence of a highly rigorous statistical analysis, it seems reasonable to accept the survey sample as being representative of currently married women 15-49 years of age in Nepal.

CHAPTER 5

FERTILITY AND REPRODUCTIVE INTENTIONS

This chapter is divided into two main sections. The first section covers fertility, both current and cumulative. The second section discusses reproductive intentions of respondents -- desire for additional children, desired sex of future children, timing of the next birth, and desired family size. An understanding of these demographic factors provides the context in which to interpret some of the later analysis on knowledge and use of family planning methods.

Fertility

Before discussing the findings on fertility, a few clarifications are in order as to the kind of data collected by the NCPS on this subject. In the interview schedule there were questions about the number of children a woman had borne, their sex, and the sex and number of children who had died. Both children living with their parents and outside the family (that is, the husband's house) were counted. Care was taken to ensure that responses to these questions summed to the total number of children ever born, as initially identified by the respondents. If there was a discrepancy in this total, the interviewer probed for more information until the correct answers were obtained. Next, a short pregnancy history covering live births during the last five years was used to collect information from those who said that they had given birth during that time period. For those who said that they had not given birth to any children during the last five years, interviewers probed about any children that might have died in order to detect the omission of any deceased children. Even with these precautions, however, some discrepancies and errors may still be present in the fertility data. Pending a detailed analysis of the quality of the fertility data, the following figures should be viewed cautiously, particularly the marital age-specific fertility rates and the marital total fertility rates (TFR).

Current Fertility

As a measure of current fertility, age-specific marital fertility rates¹ have been calculated from the NCPS data and compared with similar rates from the NFS in Table 5.1.

As is usually true for age-specific fertility rates, the marital age-specific fertility rates calculated from the NCPS data show a curvilinear relationship with age. Peak fertility is observed between the ages of 20 and 29, decreasing slowly thereafter. The survey data indicate that the marital total fertility rate² is 5.9.

This pattern is strikingly similar to the 1976 NFS, although rates for women in the prime childbearing years have declined. There is, therefore, a difference of 0.9 between the NFS and NCPS marital total fertility rates. In many countries such a difference would be interpreted as evidence of a true decline in fertility; however, a number of questions need to be examined before coming to such a conclusion for Nepal. Appendix 11 explores some of these issues and presents various calculations of age-specific fertility rates in more detail to aid in the interpretation of fertility trends in Nepal.

Current Pregnancy

Among the respondents in the NCPS sample, 10 percent were pregnant at the time of the survey. Another 8 percent were uncertain about their pregnancy status. There were only minor variations in the percentage pregnant by geographic region, urban-rural residence, and education.

¹The age-specific marital fertility rate is defined as the number of children born in a year to 1,000 married women of a specific age group.

² The marital total fertility rate is defined as the expected number of children a married woman would have under the assumption that the current marital age-specific fertility rates hold throughout her reproductive life span.

Table 5.1 Age-specific Fertility Rates and Total Fertility Rates for Currently Married Women, Nepal, 1976 and 1981

<u>Age</u>	<u>NFS 1976</u>	<u>NCPS 1981</u>
15 - 19	138	150
20 - 24	308	271
25 - 29	314	260
30 - 34	270	202
35 - 39	197	169
40 - 44	101	73
45 - 49	34	47
TFR	6.8	5.9

Note: NFS marital fertility rates are calculated on the unweighted data for births occurring 0 through 11 months before the date of interview. NCPS rates are calculated for the same time period. Age-specific rates are per 1,000 currently married women in the five-year age group. TFR is expressed per currently married woman.

The percent of women pregnant in each age group is shown in Table 5.2, and as expected, higher percentages of women in the younger age groups were currently pregnant.

Cumulative Fertility

Children ever born to currently married women by age have been summarized in Table 5.3. The mean number of children ever born to currently married women of all ages is 3.2. As expected, the mean number of children ever born gradually increases by age. Women in the age group 45-49 have an average of 5.9 live births, which is quite close

to the observed marital total fertility rate. This result can be taken to mean that, on average, Nepalese women who are completing their reproductive years have 5.9 children.

Table 5.2 Percent of Currently Married Women Who Were Pregnant at the Time of Interview by Age, Nepal 1981

<u>Age</u>	<u>Percent Pregnant</u>	<u>Total (N)</u>
15 - 19	15.4	617
20 - 24	16.5	1,217
25 - 29	11.8	1,276
30 - 34	9.6	997
35 - 39	6.2	754
40 - 44	2.0	610
45 - 49	1.3	411
All	10.3	5,881

Table 5.3 Mean Number of Children Ever Born by Age for Currently Married Women, Nepal, 1976 and 1981

<u>Age</u>	<u>NFS 1976</u>	<u>NCPS 1981</u>
15 - 19	0.3	0.4
20 - 24	1.4	1.5
25 - 29	2.9	2.8
30 - 34	4.2	4.0
35 - 39	5.2	4.7
40 - 44	5.7	5.5
45 - 49	6.1	5.9
Total	3.3	3.2

Table 5.3 also presents mean children ever born by age for the NFS for comparison with the NCPS. Except for the two youngest age groups, the mean number of children ever born has declined slightly since 1976. A comparison of children ever born for women of a certain age group in 1976 with women five years older than that age group in 1981 clearly shows that a reasonable increase in the mean number of children takes place every five years. As expected, this increase is higher at ages when the age-specific marital fertility rate is high (for example, a difference of 1.4 births between the mean children ever born to women 20-24 in 1976 and 25-29 in 1981) and smaller when the marital age-specific fertility rate is low (for example, a difference of 0.3 between means for women 35-39 in 1976 and 40-44 in 1981).

NCPS data also suggest that primary sterility is low in Nepal. About 4 percent of currently married women 35 years or older report never bearing children (Table 5.4). Their chance of getting pregnant now is probably quite low, as almost all of them have been in the marital state for at least ten years (virtually all Nepalese women get married by age 25, according to NFS results)(Nepal Fertility Survey 1976, pp. 35, 94).

Table 5.4 Percent Distribution of Currently Married Women
by Number of Children Ever Born and Age, Nepal 1981

Children Ever Born	Age						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
None	70.7	22.7	7.2	4.5	3.8	3.6	3.2
1-2	27.5	56.4	39.4	17.4	14.1	10.2	8.5
3-4	1.7	18.4	38.8	39.2	31.8	22.0	18.0
5-6	0.0	2.1	12.5	28.4	29.7	30.9	28.3
7+	0.0	0.3	2.1	10.5	20.7	33.4	42.0
Total (N)	614	1,214	1,275	997	753	610	411

Note: Column percents may not add to 100 exactly due to rounding.

As suggested by Table 5.5, there is essentially no difference in the mean number of children ever born among rural and urban women. Similarly, although some differences in the mean number of children ever born can be observed by geographical region in Table 5.6, these differences are quite small.

Table 5.5 Percent Distribution and Mean Number of Children Ever Born by Type of Residence for Currently Married Women 15-49 Years of Age, Nepal, 1981

<u>Children Ever Born</u>	<u>Residence</u>	
	<u>Urban</u>	<u>Rural</u>
0	11.5	15.7
1	14.5	14.3
2	14.9	15.3
3	16.8	14.5
4	14.6	11.8
5	10.9	9.4
6+	16.7	19.0
Total (N)	335	5,538
Mean	3.28	3.23

Living Children

Despite the attention that has been focused on reducing infant and childhood mortality in Nepal, high mortality rates still prevail. Table 5.7 compares the mean number of children ever born with mean number of surviving and non-surviving children by current age of mother. The mean number of children ever born for all ages is 3.2, and the mean number of

Table 5.6 Percent Distribution and Mean Number of Children Ever Born by Geographic Region for Currently Married Women 15-49 Years of Age, Nepal, 1981

Children Ever Born	Region		
	Mountain	Hill	Terai
0	14.7	17.2	14.1
1	16.6	14.3	13.9
2	15.5	16.9	13.8
3	13.6	14.2	15.2
4	15.3	11.0	12.4
5	7.6	9.4	9.8
6+	16.6	17.0	20.8
Total (N)	462	2,472	2,939
Mean	3.10	3.07	3.38

surviving children for all ages³ is 2.5. This implies that, on the average, Nepalese women experience a loss of about 0.7 children, or one-fifth of their children. For women in the age group 45-49 (who for the most part have completed childbearing), the mean number of children ever born is 5.9, and the mean number surviving is 4.2. If mortality is declining, then those women now in the early childbearing years would be expected to have lost fewer children, on the average, by the time they reach the end of their reproductive years than the oldest women in the NCPS sample.

³The percent distribution and mean number of living children by age are in Appendix Table 10.

Table 5.7 Mean Numbers of Children Ever Born, Surviving Children, and Dead Children and Proportion Dead by Age for Currently Married Women, Nepal 1981

<u>Age</u>	<u>Mean Number of Children Ever Born</u>	<u>Mean Number of Living Children</u>	<u>Mean Number of Children Who Have Died</u>	<u>Proportion Dead</u>
15 - 19	.39	.34	.05	.1282
20 - 24	1.54	1.20	.34	.2168
25 - 29	2.79	2.28	.51	.1828
30 - 34	4.02	3.16	.86	.2139
35 - 39	4.66	3.58	1.08	.2318
40 - 44	5.51	4.06	1.45	.2632
45 - 49	5.93	4.25	1.68	.2833
Total	3.23	2.49	.74	.2291

Desire for Additional Children

All women in the survey were asked if they wanted to have more children, and 52 percent answered affirmatively. Another 40 percent did not want more children, and 8 percent gave a "don't know" response.

As the number of living children increases, the proportion of women who want more children declines (Table 5.8). Although this pattern is found among both urban and rural women and among women in all three geographic regions, there are some differences worth noting. In Table 5.9 it can be seen that 29 percent of rural women with three or four children desire additional children compared to 19 percent of urban respondents. Women of the Mountain region with three or four children are more likely to want more (40 percent) than women of the same family size from either the Hills (25 percent) or the Terai (30 percent), as Table 5.10 shows.

Table 5.8 Percent of Currently Married Women 15-49 Years of Age Who Desire to Have More Children by Number of Living Children, Nepal, 1981

Living Children	Want More Children			Total (N)
	Yes	No	Don't Know	
None	90.4	2.6	7.0	1,066
1 - 2	70.0	20.5	9.5	2,184
3 - 4	28.3	60.8	10.9	1,649
5 - 6	8.6	86.2	5.2	776
7+	0.2*	96.6	3.1*	201

*Less than 25 women.

The desire for additional children decreases as women grow older; less than half of women over 30 years old want more children. Table 5.11 shows that within each age group the percentage of women who want more children decreases as the number of living children in their families increases.

Reproductive Intentions

This half of the chapter considers several aspects of the future reproductive behavior of respondents. After discussion of sex composition of the family-- both actual and anticipated -- the number of additional children and the desired family size are analyzed. Finally, the woman's intentions about the timing of the next birth are considered. How these factors are relate to past fertility, background traits, and other characteristics is also examined.

In the NCPS, women who desired to have more children were asked the number of additional children they wanted. This number was further

broken down into the number of sons and daughters (no sex breakdown was made if the woman could not state how many of each sex she would like). Analysis of this information will be presented in two parts. The first section focuses on whether sons or daughters were specified, without regard for the actual numbers given for each sex. In the next section, the numbers of additional sons and daughters desired are compared to determine by computation which sex, if either, was preferred over the other. Although a respondent implied from these numbers which sex she would prefer, she was not asked directly which sex she preferred.

Table 5.9 Percent of Currently Married Women 15-49 Years of Age Who Desire to Have More Children by Residence and Number of Living Children, Nepal, 1981

<u>Residence and Living Children</u>	<u>Want More Children</u>			<u>Total (N)</u>
	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>	
<u>Urban</u>				
None	92.2	3.1*	4.7*	44
1 - 2	67.4	27.1	5.6*	118
3 - 4	19.4*	74.7	5.9*	115
5 - 6	8.7*	88.3	3.1*	44
7+	3.4*	96.6*	0.0	13
All	43.8	51.2	5.0*	334
<u>Rural</u>				
None	90.3	2.6	7.1	1,022
1 - 2	70.1	20.1	9.8	2,066
3 - 4	29.0	59.7	11.3	1,535
5 - 6	8.6	86.1	5.3	731
7+	0.0	96.6	3.4*	188
All	52.0	39.1	8.9	5,542

*Less than 25 women.

Table 5.10 Percent of Currently Married Women 15-49 Years of Age Who Desire to Have More Children by Geographic Region and Number of Living Children, Nepal, 1981

Region and Living Children	Want More Children			Total (N)
	Yes	No	Don't Know	
<u>Mountain</u>				
None	82.3	3.2*	14.5*	78
1 - 2	64.2	17.0	18.9	200
3 - 4	39.6	36.6	23.8	127
5 - 6	18.4*	68.4	13.2*	48
7+	0.0	85.7*	14.3*	9
All	54.5	26.7	18.8	462
<u>Hill</u>				
None	90.7	3.1*	6.2	475
1 - 2	71.4	18.8	9.8	923
3 - 4	24.6	64.4	11.0	670
5 - 6	6.1*	87.5	6.4*	317
7+	0.0	95.6	4.4*	86
All	51.6	39.6	8.8	2,471
<u>Terai</u>				
None	91.2	2.1*	6.7	513
1 - 2	69.9	22.6	7.5	1,061
3 - 4	29.5	61.5	9.0	852
5 - 6	9.4	87.3	3.3*	411
7+	0.4*	98.4	1.2*	106
All	51.0	42.0	7.0	2,943

*Less than 25 women.

Table 5.11 Percent of Currently Married Women 15-49 Years of Age Who Desire to Have More Children by Age and Number of Living Children, Nepal, 1981

<u>Age and Living Children</u>	<u>Want More Children</u>			<u>Total (N)</u>
	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>	
<u>15 - 29</u>				
None	92.0	0.9*	7.1	908
1 - 2	79.0	11.5	9.5	1,530
3 - 4	37.7	51.3	11.0	584
5 - 6	15.7*	76.5	7.8*	81
7+	5.1*	94.9*	0.0	4
All	73.3	17.7	9.1	3,107
<u>30 - 39</u>				
None	86.9	7.1*	6.0*	109
1 - 2	57.8	31.7	10.5	465
3 - 4	28.7	58.5	12.8	726
5 - 6	10.5	83.5	6.1*	378
7+	0.0	96.5	3.5*	72
All	34.9	55.1	9.9	1,750
<u>40 - 49</u>				
None	66.6	25.2*	8.2*	49
1 - 2	27.3	65.7	7.0*	190
3 - 4	11.3	81.9	6.8*	339
5 - 6	4.6*	91.9	3.5*	317
7+	0.2*	96.8	3.0*	124
All	13.5	81.1	5.4	1,019

*Less than 25 women.

Analysis in the third section uses the total number of additional children given by the respondent. Desired family size, presented in the fourth section, is another artificial variable. It is computed by adding the actual number of living children and the number of additional children desired. Further remarks about the construction of all of these variables are made at the beginning of each section.

Desired Sex of Future Children

In the NCPS, women who desired to have more children were asked whether they would like to have a son or a daughter. It is apparent from Table 5.12 that a very strong desire for sons prevails among Nepalese women. Among respondents who do not have any children, 86 percent want sons. This proportion increases to 100 percent among women who have three or four living children but no sons. Similar patterns are found for respondents having one son, two sons, or three sons among different numbers of living children. For example, among women who have one living child, a son, 82 percent desire sons, but the percentage increases to 94 percent among women who have four or more living children with only one son.

Conversely, the percentage of women desiring more sons for a fixed number of living children decreases with an increase in the number of surviving sons. For example, among women who have three living children and no sons, the percentage desiring sons is 100 percent, but this percentage decreases to 13 for women who have three living children who are sons. Regardless of the number of living children, the number of living sons is a crucial factor in determining the desire for sons.

Sex Preference for Future Children

In addition to the question on number of additional children, respondents were asked how many more of each sex they would like to have. A variable was constructed to represent the preferred sex of future children. Those who desired to have more sons than daughters were coded as having a preference for sons. Likewise, women who desired

to have more daughters than sons were coded as having a preference for daughters. Respondents who said that they desired to have an equal number of sons and daughters, as well as those who did not give any conclusive answer regarding the sex of their future children, were coded as not having any sex preference at all.

Table 5.12 Percent of Women Who Want a Son by Number of Living Children and Living Sons for Currently Married Women, 15-49 Years Who Desire More Children, Nepal 1981

<u>Number of Living Children</u>	<u>Number of Living Sons</u>	<u>Percent Who Want a Son</u>
None	None	86.2
1	None	89.7
	1	82.2
	All	85.6
2	None	96.7
	1	89.0
	2	33.6
	All	78.3
3	None	100.0
	1	90.2
	2	64.9
	3	12.8*
	All	73.9
4+	None	100.0
	1	94.1
	2	78.0
	3	79.5
	4+	19.3*
	All	80.2

*Less than 25 women.

Overall, about 33 percent of the respondents had no preference as to the sex of their future children. Of the 67 percent who indicated the desired sex of future children, a very large proportion (89 percent) expressed a preference to have sons.

Table 5.13 summarizes the desire for more children by sex preference according to the number of living children and number of living sons the respondents already have. It is apparent from the table that among respondents who do not have any living children, 42 percent did not show

Table 5.13 Percent Distribution of Currently Married Women 15-49 Years of Age Who Desire More Children by Number of Living Children, Living Sons, and Sex Preference for Future Children, Nepal, 1981

Number of Living Children	Number of Sons	Total (N)	Sex Preference		
			None	Female	Male
None	None	961	41.5	0.7*	57.8
1	None	392	21.0	0.0	79.0
	1	460	52.2	12.4	35.4
2	None	196	4.0*	0.6*	95.4
	1	316	36.8	0.9*	62.2
	2	152	36.7	55.4	7.9*
3	None	53	4.8*	0.0	95.2
	1	132	12.0*	0.0	88.0
	2	112	38.3	16.7*	45.0
	3	41	12.8*	80.5	6.7*
4+	None	31	4.1*	4.1*	91.9
	1	50	3.4*	2.5*	94.1
	2	53	38.8*	2.8*	58.4
	3	39	29.5*	16.7*	53.8*
	4+	20	7.6*	73.1*	19.3*
All		3,007	33.4	7.6	59.0

*Less than 25 women.

any sex preference for their future children, and 58 percent had a sex preference. In the tradition-bound Nepalese culture, which places a premium on sons, it is surprising that a relatively large proportion of respondents showed no sex preference at all. It should be noted, however, that a large proportion of those women who have no living children are young nulliparous women. Among nulliparous women, it is quite logical that they wish above all to demonstrate their fecundity. Once their fecundity is established, then the sex of their future children becomes more important. Accordingly, the proportion with no preference drops almost to zero as family size increases, and, in general, the proportion preferring male children after one birth rises sharply as the number of living children increases, particularly when there is no son or only one son.

It is also clear from Table 5.13 that preference for females increases from less than one percent among women who do not have any children, to 80 percent as the number of living children increases to three with no living daughters. That is, once the desired number of sons is achieved, there is some desire for daughters to balance the sex composition of the family. Women with more sons show a stronger preference for daughters than women with few or no sons at all.

A similar pattern can also be observed in the "no preference" column. The percentage of women showing no sex preference for their future children is small if there are no living sons, but when there is at least one living son, the percentage not expressing any sex preference is substantially higher. The small numbers of women with three or more children and no sex preference suggest caution when interpreting these data, however.

In Nepal the strong preference for sons has two plausible primary causes: 1) religious, and 2) economical. In the Hindu religion it is important to have a son so the clan can continue to exist. At the same time, a son is required to perform religious and spiritual activities, such as Sraddha, for the spiritual progress and emancipation of his

deceased parents. In a predominantly agricultural country like Nepal, the value of having a son is important to the economic and social security of the parents. Thus it is only natural that the interplay of these two factors results in a strong preference for sons.

Number of Additional Children Desired

The mean number of additional children wanted by those women who expressed a desire to have more children is summarized in Table 5.14. It is apparent from the table that as the number of living children increases, the mean number of additional children desired decreases. In other words, as women attain the number of children they desire, they want fewer additional children.

Son preference is also a key factor in determining the number of additional children desired. The mean number of additional children desired decreases within the categories of living children when the number of surviving sons increases. For example, respondents who have four or more living children but no sons desire, on the average, 1.2 more children. However, when they have four or more sons, they desire, on the average, only 0.1 more children.

Desired Family Size

Before presenting the results of the data analysis on desired family size, an explanation of how this concept was measured in the NCPS would be helpful. Respondents who answered affirmatively to the question, "Do you want (more) children?", were asked how many (additional) children they wanted. This number of children desired was added to the number of living children to obtain the desired family size. If the woman was currently pregnant, the desired family size was increased by one. In the case of women who did not want to have more children, the actual number of living children was assumed to be their desired family size. The number obtained can be thought of as the family size that might be expected at the completion of a woman's reproductive years, if the woman's wishes were realized exactly.

Table 5.14 Mean Number of Additional Children Desired for
Currently Married Women 15-49 Years by Number
of Living Children and Living Sons, Nepal 1981

<u>Living Children</u>	<u>Living Sons</u>	<u>Mean Number of Additional Children Desired</u>
None	None	3.18
1	None	2.23
	1	1.98
	All	2.08
2	None	1.61
	1	1.04
	2	1.02
	All	1.16
3	None	1.61
	1	0.69
	2	0.47
	3	0.60
	All	0.64
4+	None	1.18
	1	0.33
	2	0.17
	3	0.13
	4+	0.09
	All	0.20
All		1.33

This approach and its interpretation differ somewhat from the measurement of desired family size in other fertility studies. Another method is to ask the number of children a woman would want to have if she could choose the number exactly. Since this question is hypothetical, it is open to a broad range of interpretation by the respondent. The measure used in the NCPS has another kind of limitation in its assumption

that the desired family size equals the actual number of living children for women who do not want any more children. It is possible that some proportion of their children may be the result of unplanned and unwanted pregnancies. Furthermore, a positive relationship between desired and actual family size exists by definition, as actual size contributes to the desired family size in the NCPS measure. This positive correlation may not be quite the same in meaning as the observed correlation between desired and actual family size when the other approach is used. These are important conceptual distinctions to bear in mind while reviewing the findings on desired family size presented here.

Table 5.15 summarizes the mean desired family size by the number of living children and the number of living sons. As with the number of additional children desired, the sex of the living children plays an important role in determining the desired family size among Nepalese women. For example, women who have three living children and no sons have a mean desired family size of 4.7, which is about one child more than for women with at least one son.

Differentials in Desired Family Size

Table 5.16 summarizes the desired family size for six selected background variables, contraceptive use, and three fertility-related variables. These data demonstrate, first of all, that desired family size increases with the age of the respondent. For example, women 15-19 want an average of 3.5 children, compared to 4.4 for women 45-49. Data from the 1976 NFS demonstrate a similar pattern; desired family size increases with age. There appears to be little, if any, decline in desired family size since 1976, but comparison of the data from these two surveys must be done carefully because the methods of measurement of desired family size were different.⁴

⁴Desired family size in the NFS was estimated on the basis of the following question: "If you could choose exactly the number of children to have in your life, how many would that be?"

Table 5.15 Mean Desired Family Size by Number of Living Children and Number of Living Sons for Currently Married Women 15-49 Years, Nepal 1981

<u>Number of Living Children</u>	<u>Number of Living Sons</u>	<u>Mean Desired Family Size</u>
None	None	3.36
1	None	3.39
	1	3.12
	All	3.24
2	None	3.72
	1	3.15
	2	3.10
	All	3.26
3	None	4.67
	1	3.76
	2	3.54
	3	3.64
	All	3.71
4+	None	5.67
	1	4.88
	2	4.98
	3	5.15
	4+	6.30
	All	5.30

Differences in desired family size by geographic region were minor. A similar pattern was observed in the NFS. No differences in desired family size were found by residence or occupation. The mean desired family sizes for literate women (3.6 children) and illiterate women (4.0 children) were only slightly different.

Larger differences in mean desired family size were observed among the five development regions. Respondents from the Far Western development region reported the highest mean desired family size (4.4); the lowest

mean desired family size was reported by women in the Central development region (3.7). At this stage of the analysis of NCPS data, it is difficult to account for this difference with precision. However, it is thought that a partial explanation may be found in seasonal migration patterns. In the Far Western development region, there is substantial temporary migration during the slack, or winter, season. Families in this region may feel some need to have more children in order to maintain their permanent home and family land while some of the family is away. Thus, they may express the desire for somewhat larger families. This possibility cannot be tested with NCPS data, however, as the survey was not designed to examine this phenomenon.

Some differences in mean desired family size with respect to the use of contraception have been observed. It is somewhat surprising that the women who have at one time used, or are currently using a family planning method, desire larger families than women who have never used family planning. However, two factors should be considered in relation to this finding. First, both ever and current users of contraception are much less likely to want more children than women not using family planning (see Table 7.7); in other words, Nepalese women using contraception have, for the most part, achieved their desired family size. Second, the actual number of living children that users have is higher than for nonusers (see Table 7.7). Since the desired family size variable depends on both the actual number and the number of additional children wanted, desired family size for users is almost exclusively a reflection of their actual family size (including births that were not planned); and for nonusers it is a combination of both actual and desired number of children.

Although no differences in mean desired family size were found between women who did and did not want more children, the mean desired family size for women who gave a "don't know" response was strikingly lower. If a large proportion of these women were infertile, they might not be able to respond whether they have any desire for more children. This possibility cannot be adequately tested because no question was

Table 5.16 Mean Desired Family Size and Percent Distribution of Desired Family Size for Currently Married Women 15-49 Years of Age by Selected Variables, Nepal, 1981

<u>Variable</u>	<u>Desired Family Size</u>				<u>Total (N)</u>	<u>NCPS Mean</u>	<u>NFS Mean¹</u>
	<u>0-2</u>	<u>3-4</u>	<u>5-6</u>	<u>7+</u>			
<u>Age</u>							
15-19	14.4	64.0	19.4	2.2	601	3.5	3.6
20-24	17.3	64.4	16.4	2.0	1,184	3.5	3.7
25-29	14.7	60.2	21.9	3.2	1,240	3.8	3.9
30-34	12.1	49.2	32.4	6.3	980	4.1	4.2
35-39	14.3	44.0	33.0	8.7	750	4.2	4.3
40-44	15.3	37.5	34.7	12.5	604	4.4	4.3
45-49	18.8	34.2	33.0	14.1	410	4.4	4.3
All	15.1	53.3	25.9	5.8	5,770	3.9	4.0
<u>Geographic Region</u>							
Mountain	21.1	44.7	29.6	4.7	460	3.8	3.6
Hill	15.1	55.3	24.4	5.3	2,462	3.9	4.0
Terai	14.1	52.9	26.5	6.5	2,848	4.0	4.1
<u>Development Region</u>							
Eastern	15.1	54.3	23.2	7.4	1,233	3.9	---
Central	18.4	52.9	24.2	4.5	1,900	3.7	---
Western	18.7	53.4	21.3	6.6	1,176	3.8	---
Mid Western	8.5	58.7	28.5	4.3	656	4.1	---
Far Western	7.1	47.8	38.4	6.8	806	4.4	---
<u>Residence</u>							
Urban	15.6	57.5	21.5	5.3	331	3.8	---
Rural	15.0	53.0	26.1	5.9	5,439	3.9	---
<u>Occupation</u>							
Agriculture	13.2	51.3	29.9	5.6	2,559	4.0	---
Non-agriculture	16.4	55.3	23.9	4.4	586	3.8	---
Not Working	16.5	54.8	22.4	6.4	2,618	3.9	---
<u>Literacy</u>							
Literate	19.2	59.3	18.1	3.4	424	3.6	---
Illiterate	14.7	52.8	26.5	6.0	5,344	4.0	---

Table 5.16 (continued)

<u>Variable</u>	<u>Desired Family Size</u>				<u>Total (N)</u>	<u>NCPS Mean</u>	<u>NFS Mean¹</u>
	<u>0-2</u>	<u>3-4</u>	<u>5-6</u>	<u>7+</u>			
<u>Ever Use of Contraceptive</u>							
Yes	10.5	52.2	27.7	9.6	508	4.2	--
No	15.5	53.4	25.7	5.4	5,259	3.9	--
<u>Current Use of Contraceptive</u>							
Yes	9.7	53.0	27.8	9.5	403	4.2	--
No	15.5	53.3	25.7	5.5	5,363	3.9	--
<u>Desire for More Children</u>							
Yes	4.6	64.8	26.3	4.3	2,920	4.1	--
No	19.7	42.4	29.3	8.7	2,340	4.0	--
Don't Know	53.6	37.0	7.9	1.5	510	2.4	--
<u>Number of Living Children</u>							
0	18.7	63.5	16.3	1.5*	1,035	3.4	--
1-2	31.6	53.5	13.5	1.4	2,134	3.2	--
3-4	0.0	78.3	19.3	2.4	1,627	4.0	--
5-6	0.0	0.0	93.4	6.6	773	5.5	--
7+	0.0	0.0	0.0	100.0	201	7.8	--
<u>Number of Living Sons</u>							
0	17.8	61.7	18.2	2.3	1,848	3.5	--
1	24.6	53.6	19.5	2.2	1,717	3.5	--
2	9.1	58.3	26.6	6.1	1,265	4.1	--
3	0.0	40.5	49.7	9.8	594	4.9	--
4+	0.0	7.4	57.2	35.4	335	6.3	--
<u>Number of Dead Children</u>							
0	14.9	56.6	23.7	4.8	3,639	3.8	--
1	14.5	50.4	27.8	7.3	992	4.1	--
2	15.7	44.5	31.4	8.4	585	4.2	--
3+	16.4	45.5	30.8	7.2	553	4.1	--

¹ Nepal Fertility Survey 1976, First Report, p. 57.

*Less than 25 women.

asked about perceived fecundity. Alternatively, if many of these respondents were younger women, who have a long reproductive lifespan ahead of them, they may not yet have made a definite decision about the family size they would want. Younger women are not, however, disproportionately represented in the group who stated that they did not know if they wanted more children. Additional analysis showed that age does not account for the lower mean desired family size among women who do not know if they want more children. Within every age group, the mean desired family size for women who were uncertain about having more children was smaller than the means for either those who wanted more children or those who did not want more (see Appendix 12). Other factors available in the NCPS survey might be used in a more extensive analysis to better understand the small desired family size in this group of women.

Mean desired family size increases with both the number of living children and the number of living sons the respondent has. This result concerning desired family size and living sons is not contrary to the earlier finding in the sex preference section when it is recalled that the base population there consisted of only the respondents who desired to have more children. The base population in this section includes almost all the respondents.

Although desired family size is not changed much by the number of deceased children (up to two dead children), the desired family size is lowest among respondents who have experienced the deaths of three or more offspring.

Time for Next Child

In the NCPS, respondents were asked whether they wanted to have any more children apart from any current pregnancy. Those who said that they wanted to have additional children were then asked when they would like to have their next child. Thus, only those women who expressed the desire to have another child were asked about the timing of their next child.

Among those who wish to have more children, the largest percentage wanted to have the next child as soon as possible (36 percent), followed by those who wanted a child within a year (14 percent). Thus, half of the respondents desired to have children within a year. Another 12 percent preferred to have the next child in two to three years and 6 percent in more than three years. About 32 percent of the respondents were inconclusive about any time frame.

From Table 5.17 it is clear that a relatively large proportion of older women who want another child⁵ prefer to have their next child as soon as possible. These women may desire their next child as soon as possible because they are approaching the end of their reproductive life. On the other hand, most women in the youngest age group (15-19 years) are nulliparous, and they would like to demonstrate their fecundity by having a child as soon as possible. Women of all ages were quite similar otherwise in their responses to this question.

Urban and rural respondents were generally alike in the desired timing for the next child, as Table 5.18 shows, except that smaller proportions of urban women gave inconclusive responses (24 percent) for the timing of their next child when compared to rural women (about 32 percent). This result is an indication that a planning perspective about births is relatively more pronounced for urban women. Higher literacy, a higher level of knowledge of contraception, and a higher level of contraceptive use among urban women may account in part for this difference.

Analysis of desired timing for the next child by geographic region and development region revealed no major differences.

⁵It should be noted, however, that the number of women 40-49 who want more children is less than 15 percent of all women 40-49 in the sample.

Table 5.17 Percent Distribution of Currently Married Women 15-49 Years of Age Who Want Additional Children by Time They Would Like the Next Child and Age, Nepal, 1981

<u>Desired Timing</u>	<u>Age</u>							<u>All</u>
	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30-34</u>	<u>35-39</u>	<u>40-44</u>	<u>45-49</u>	
As soon as possible	38.2	34.9	32.2	38.3	37.9	50.5	54.8*	36.2
In next year	11.8	13.3	13.9	14.1	17.3	11.8*	17.7*	13.5
In 2 years	5.5	8.1	8.8	8.9	8.4*	8.1*	4.4*	7.9
In 3 years	4.1*	4.9	6.1	4.4*	4.2*	0.0	0.0	4.7
After 3 or more years	5.1	5.5	8.8	5.5*	2.6*	3.7*	0.0	6.0
Whenever it happens	21.6	22.1	22.4	19.2	22.4	20.1*	17.7*	21.6
Don't know	13.6	11.2	7.8	9.5	7.2*	5.8*	5.2*	10.1
Total (N)	544	968	750	406	202	109	28	3,007

*Less than 25 women.

Table 5.18 Percent Distribution of Currently Married Women 15-49 Years of Age Who Want Additional Children by Time They Would Like Next Child and Type of Residence, Nepal, 1981

<u>Desired Timing</u>	<u>Residence</u>	
	<u>Urban</u>	<u>Rural</u>
As soon as possible	35.4	36.3
In next year	13.9*	13.5
In 2 years	10.3*	7.8
In 3 years	6.5*	4.6
After 3 or more years	9.7*	5.8
Whenever it happens	19.0	21.7
Don't know	5.3*	10.3
Total (N)	146	2,861

*Less than 25 women.

Summary

Cumulative and current fertility in Nepal remain at high levels. The marital total fertility rate of about 6 children per woman could possibly be interpreted as a decline since 1976, but more detailed analysis of the fertility data in NCPS would be necessary to decide if a true decline in fertility is actually occurring. The age-specific fertility rates derived from NCPS data show that births are concentrated among women 20 to 30 years of age. Only small differences were observed in the mean number of children ever born for urban versus rural residents and women from the Mountains, Hills, and Terai. The mean number of living children, 2.5, represents a loss of 0.7 children, on average, among women of all ages in the sample.

Strong preferences for male children continue to be observed among Nepalese women. When women do not have sons among their children they

are more likely to express a desire to have sons in the future, but the data also seem to suggest that some thought to a balanced sex composition emerges as women attain the number of sons they desire. Religious and economic values are important elements in the preference for sons.

The mean desired family size for all women was estimated to be 3.9. Geographic region, location of residence, occupation, and education appeared to make little difference in the estimated desired family size. Desired family size increased as woman's age, number of living children, and number of living sons increased. The finding that women using contraception had a higher mean than women not using contraception is typical for a country in the initial stages of adoption of contraceptive practice.

Among those women who wanted more children, there was some evidence of a desire to space births, but approximately one-third gave an inconclusive answer about timing of the next birth. This concept is important for widespread adoption of temporary family planning methods.

CHAPTER 6
KNOWLEDGE OF CONTRACEPTIVE METHODS

Introduction

Although the family planning movement was started during the late fifties, contraceptive services were provided only after the creation of the National Family Planning and Maternal Child Health Project in 1968. In the early phase of the Project, only district headquarters were covered by paramedical personnel. From the very inception of the FP/MCH Project, emphasis was placed upon permanent sterilization methods. For that reason, rural women generally consider family planning to be a synonym for sterilization. However, up to 1975-76, there were less than 300 clinics through which family planning services were being provided.

National data on contraceptive knowledge and use among Nepali women is available for 1976, when the Nepal Fertility Survey was carried out as a part of the World Fertility Survey. The present survey, the Nepal Contraceptive Prevalence Survey, was carried out in 1981. Hence the data available from this survey can be compared to the earlier survey to assess the extent to which the FP/MCH Project and other providers have been able to reach the population as a whole.

Knowledge of family planning methods was calculated on the basis of the questionnaire responses to a series of questions asked of all respondents. Data were collected on both unprompted and prompted knowledge of contraceptive methods. The respondent was first asked if she had heard of any family planning method. If the reply was affirmative, then a further question was asked about which methods were known. The response to this question constituted the respondent's unprompted knowledge about contraceptive methods. If the respondent failed to mention some of the listed methods (that is, pill, condom, IUD, male sterilization, female sterilization, injectables, traditional, other methods), she was prompted with the common names of those methods. Interviewers used brand names for

pill (Gulaf) and condom (Dhaal) if the respondent did not understand the names of these methods. It should be noted that this prompting involved naming a method, not describing it.

The purpose of this chapter is to describe the prevalence of contraceptive knowledge among currently married women 15-49 years of age. Family planning methods have been broadly categorized into two groups: (1) modern methods, that is, pills, condom, IUD, female sterilization, male sterilization, and injectables, and (2) traditional and other methods.

Overall Knowledge of Contraception

Table 6.1 presents the socio-economic and demographic characteristics of women who know at least one modern method of family planning. In this table women who know only traditional or other methods are excluded. Almost 52 percent (51.9 percent) of currently married women 15-49 years of age know at least one method of family planning (Table 6.1). According to the Nepal Fertility Survey, the proportion of currently married women knowing at least one family planning method was 22.1 percent in 1976.¹ Thus, there has been a sharp rise in the knowledge level between 1976 and 1981.

Literacy has a positive impact on the level of contraceptive knowledge. Overall contraceptive knowledge increases steadily with an increase in the respondent's literacy level. (Literacy refers to all four categories of education other than "illiterate" shown in Table 6.1). More than 80 percent of literate women know at least one method. But in the case of illiterate women, only 49 percent know at least one method of contraception.

¹This percentage was calculated on the unweighted NFS data. Since the weights were very close to 1, however, this figure would be almost the same if the weights had been used. Recalculation was necessary because the denominator in the NFS First Report was ever-married women 15-49 years of age, rather than currently married women.

Table 6.1 Percent Distribution of Currently Married Women 15-49
Years of Age Knowing at Least One Modern Method of
Contraception by Various Background Variables, Nepal, 1981

Background Variables	Percent Knowing at Least One Modern Method
<u>Age</u>	
15-19	50.1
20-24	52.0
25-29	54.0
30-34	53.5
35-39	50.2
40-44	49.9
45-49	49.8
All	51.9
<u>Education</u>	
Illiterate	49.3
Literate	75.8
Primary	81.7
Middle, Secondary	91.5
Completed Secondary	99.5
<u>Geographic Region</u>	
Mountain	20.4
Hill	43.9
Terai	63.5
<u>Type of Residence</u>	
Urban	75.6
Rural	50.5
<u>Development Region</u>	
Eastern	58.6
Central	62.6
Western	56.4
Mid Western	23.4
Far Western	32.3
<u>Work Status</u>	
Working	51.5
Not Working	52.5
<u>Number of Living Children</u>	
0	45.0
1	51.0
2	51.1
3	52.6
4	57.8
5	57.5
6+	55.3

Women living in the Terai region have a higher overall level of contraceptive knowledge (64 percent) compared to those from the Hill and Mountain regions (44 and 20 percent respectively). The regional differences may be related to the greater accessibility of transportation, communications, and other amenities in the Terai region.

The overall level of knowledge of contraceptive methods for urban women (76 percent) is 25 percentage points higher than that for rural women (Table 6.1). In general, urban women are economically better off, live in areas where communication facilities are better, and are relatively more educated than rural women. All of these factors commonly contribute to better awareness of family planning.

Women from the Central development region have the highest level of contraceptive knowledge (63 percent), followed by the women from the Eastern (59 percent) and Western development regions (56 percent). Women from the Mid Western development region have the lowest proportion of contraceptive knowledge (23 percent). This development region is also one of the least developed in Nepal, indicating that knowledge of contraceptive methods and socio-economic development are related, and that those women with easier access to the urban areas tend to know more about family planning than others.

Table 6.1 also shows that women with no living children have a lower overall knowledge level (45 percent) than women having at least one living child. There is no striking difference in overall knowledge of contraceptive methods among currently married women having up to three living children. However, in general, knowledge of contraceptive methods increases as the number of children increases; as the data indicate over 55 percent of women with four or more children know some modern method of family planning.

Knowledge of Specific Family Planning Methods

Of the total respondents who know any family planning method, female sterilization is the most widely known (44 percent), as Table 6.2

Table 6.2 Percent of Currently Married Women 15-49 Years of Age
Who Know Specific Family Planning Methods, Nepal, 1981

<u>Method</u>	<u>Percent</u>	<u>Total (N)</u>
Female Sterilization	44.4	5,877
Vasectomy	38.1	5,877
Pill	25.1	5,881
Condom	13.6	5,876
Injectable	9.0	5,872
IUD	8.4	5,868
Traditional	1.5	5,862
Other	0.4	5,846

Note: The total sample size varies among the methods due to nonresponse for particular methods.

shows. Although this method was introduced in the country in 1972-73, knowledge of this method has surpassed knowledge of methods available before that time. Female sterilization services are available mostly through the seasonal sterilization camps.

After female sterilization, male sterilization is the most commonly known method among the methods available (38 percent). After female and male sterilization, the oral pill ranks third in level of knowledge. It was known by one quarter of the respondents, which is low compared to Bangladesh and other Indian subcontinent countries. However, the level of knowledge for oral pills has increased by more than 100 percent since the 1976 NFS, which found that 12 percent of currently married women knew the pill.²

²This figure is also based on the unweighted NFS data.

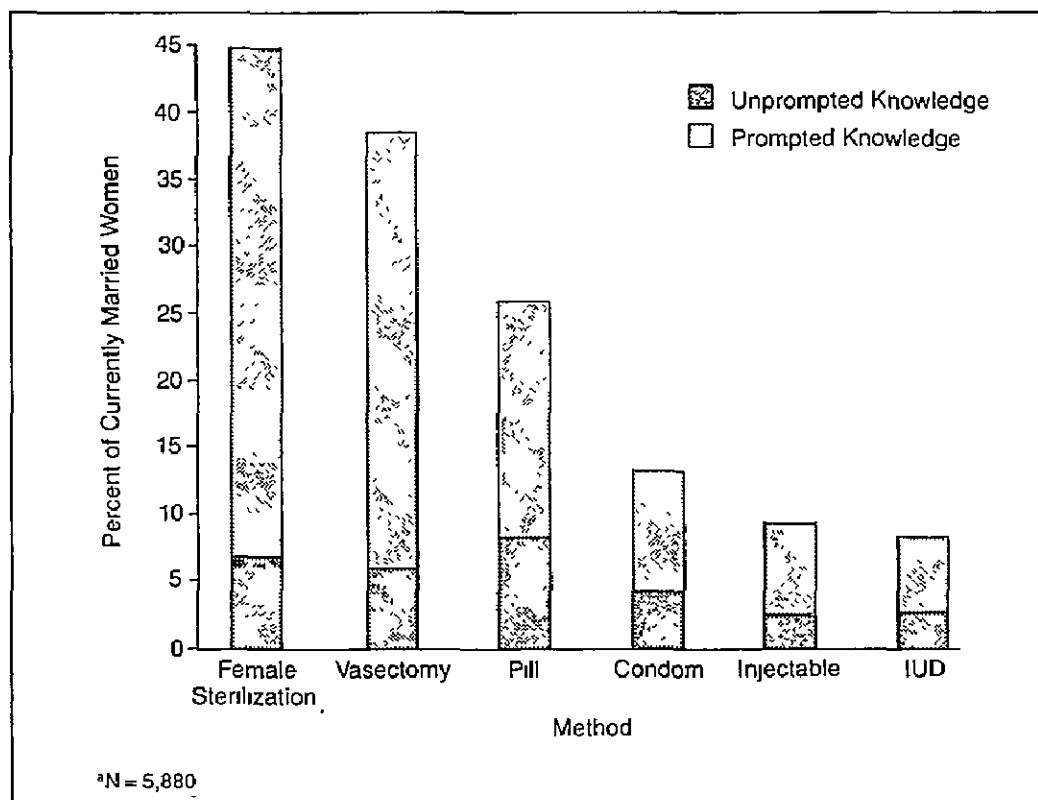
Reported knowledge of the condom (14 percent) is not encouraging to family planning program administrators. On the basis of service statistics, condom acceptors rank the highest (more than 50 percent). Further, there is an increasing trend toward condom distribution by government institutions as well as by voluntary and retail sales projects (such as CRS). Reported knowledge of the condom may be low because the female respondents in the NCPS may have felt uncomfortable to talk about the condom, a male method, to interviewers, who were mostly male.

In the case of injectables, only 9 percent of currently married women aged 15-49 years know this method. The low level of knowledge of the IUD is also not encouraging. Although IUD services have been provided from the inception of the program, it was known by only 8 percent of the respondents.

Knowledge levels for traditional and other methods are only 2 percent and 0.4 percent, respectively.

As mentioned previously, information on knowledge of specific contraceptive methods was collected using both unprompted and prompted responses. In this report a respondent is considered to have knowledge of a method if she indicated she knew it either spontaneously or through prompting with a colloquial name for the method. However, it is interesting to look at the impact of prompting procedures on the NCPS results. As can be seen in Figure 6.1, prompting played a significant role in increasing the levels of knowledge for all of the specific methods. The low level of unprompted knowledge and the subsequent increase with prompting may be due to: shyness of the Nepalese women to respond about contraceptives spontaneously; only having heard about the method but not knowing much about it; problems of understanding the concept of family planning or the words used in the questionnaire for the specific methods. There is no way to determine the exact cause of under-reporting knowledge, which is evident in the unprompted levels. But it is clear from the graph that prompting had a very strong, positive effect on reporting awareness of family planning methods.

Figure 6.1 Percent Distribution of Currently Married Women 15-49 Years of Age^a by Unprompted and Prompted Knowledge of Specific Family Planning Methods, Nepal, 1981



Differentials in Family Planning Knowledge

Table 6.3 shows the distribution of knowledge for various methods of family planning by age group. Note that the distributions for knowledge of traditional and other methods are shown for informational purposes, but they will not be discussed because of the small numbers of women reporting knowledge of them.

Even though there is a slight increase in the level of knowledge for the age group 25-29 for male and female sterilization, pill, and injectable, level of knowledge does not seem to vary significantly with age. However, family size does appear to play an important role (Table 6.4). For each method, women having no living children are less likely to know of it compared to women who have at least one living child. The

Table 6.3 Percent Distribution of Currently Married Women Aged 15-49 by Age and Knowledge of Specific Family Planning Methods, Nepal, 1981

Method	Age						
	15 - 19 (616)	20 - 24 (1,217)	25 - 29 (1,276)	30 - 34 (997)	35 - 39 (754)	40 - 44 (610)	45 - 49 (411)
Female Sterilization	42.1	45.2	46.9	45.7	43.8	41.7	40.1
Vasectomy	35.1	38.2	40.0	39.0	36.9	37.3	38.3
Pill	24.5	26.4	26.8	26.2	24.1	20.4	23.4
Condom	13.5	15.7	13.9	14.2	12.3	10.5	11.9
Injectable	7.2	9.7	9.7	10.1	9.0	7.4	7.2
IUD	6.4	9.8	9.0	10.2	6.6	6.9	7.1
Traditional	0.9	1.8	1.6	1.7	1.9	0.6	1.1
Others	0.0	0.3	0.2	0.5	0.7	0.6	0.8

Note: In this and subsequent tables on knowledge, the numbers in parentheses in each column heading indicate the number of women in each age group upon which the percentage in each cell is based. The actual numerical base in some cells may differ slightly from the number shown because of occasional non-response to questions about specific methods.

Table 6.4 Percent Distribution of Currently Married Women 15-49 Years of Age by Knowledge of Specific Methods and Number of Living Children, Nepal, 1981

Method	Number of Living Children				
	0 (1,066)	1-2 (2,184)	3-4 (1,650)	5-6 (777)	7+ (201)
Female sterilization	39.6	43.7	46.8	47.6	48.7
Vasectomy	33.5	37.5	40.4	41.4	40.3
Pill	19.9	25.0	26.9	27.6	30.1
Condom	10.9	13.7	15.0	13.2	15.9
Injectable	5.7	8.9	10.6	10.0	11.1
IUD	5.3	8.1	9.8	10.2	9.7
Traditional	0.8	1.4	1.8	1.4	3.2
Others	0.3	0.2	0.7	0.3	0.3

Note: The actual n upon which a cell percentage was calculated in this table may differ slightly from the n shown in parentheses in each column heading due to nonresponse.

tendency for level of knowledge to be higher as the number of living children increases is seen most clearly for the pill and female sterilization.

As shown in Table 6.5, women who are economically active have somewhat lower levels of knowledge for specific methods than non-working women. However, among working women, those who work outside the agricultural sector have higher levels of knowledge of specific methods compared to those women who work in agriculture. The differences are quite striking for female sterilization and vasectomy, and somewhat less so for the temporary modern methods.

Substantial differences were found between urban and rural respondents in reported knowledge of all family planning methods (Table 6.6). In the case of the condom, urban women are almost four times as likely as

rural women to know this method. Urban women are also more than five times as likely to be aware of the IUD and injectable, and twice as likely to know the pill. The differential persists in the same direction for knowledge of male and female sterilization, but it is not as strong as for the other methods.

There are several possible reasons for the higher levels of contraceptive awareness among urban respondents. First, contraceptives are available at numerous outlets in towns and cities. Second, in the early days of both the FP/MCH Project and the CRS Project, they carried out their activities in the district headquarters, which are urban areas in the present sample. Third, exposure to information, education, and communications activities is greater in urban than in rural areas.

Table 6.5 Percent Distribution of Currently Married Women 15-49 Years of Age by Occupation and Knowledge of Specific Family Planning Methods, Nepal, 1981

<u>Method</u>	<u>Working</u>			<u>Not Working</u> (2,656)
	<u>Agriculture</u> (2,619)	<u>Non-agriculture</u> (597)	<u>Total</u> (3,216)	
Female Sterilization	39.1	65.3	44.0	45.1
Vasectomy	34.2	50.1	37.2	39.4
Pill	19.9	27.5	21.3	29.8
Condom	9.3	12.7	10.0	17.9
Injectable	3.8	11.3	5.2	13.6
IUD	2.7	10.7	4.2	13.6
Traditional	0.0	3.5	0.7	2.5
Others	0.0	0.7	0.2	0.7

Note: The actual n upon which a cell percentage was calculated in this table may differ slightly from the n shown in parentheses in each column heading due to nonresponse.

Table 6.7 shows that women in the Terai region have higher levels of knowledge for both male and female sterilization (60 percent and 46 percent, respectively) than women of the Hills (about 30 percent for both methods) and Mountains (about 10 percent for both). The greater availability of male and female sterilization in the Terai region probably has some effect on the level of knowledge found there.

Terai women also reported more knowledge of injectables and IUD. However, a higher proportion of women from the Hill region have knowledge of the pill and condom than do women from other regions. Although there is no direct evidence in the survey, the investigators believe that women in the Terai region may have been less willing to report knowledge of the pill and condom than Hill and Mountain respondents. Thus, actual knowledge may be somewhat higher than the levels shown.

Table 6.6 Percent Distribution of Currently Married Women 15-49 Years of Age by Type of Residence and Knowledge of Specific Family Planning Methods, Nepal, 1981

<u>Method</u>	<u>Residence</u>	
	<u>Urban</u> <u>(335)</u>	<u>Rural</u> <u>(5,545)</u>
Female Sterilization	71.8	42.8
Vasectomy	67.2	36.4
Pill	57.0	23.0
Condom	46.0	11.6
Injectable	38.3	7.2
IUD	40.4	6.5
Traditional	3.6	1.4
Others	2.0	0.3

Note: The actual n upon which a cell percentage was calculated in this table may differ slightly from the n shown in parentheses in each column heading due to nonresponse.

Table 6.7 Percent Distribution of Currently Married Women 15-49 Years of Age by Geographic Region and Knowledge of Specific Family Planning Methods, Nepal, 1981

Method	Region		
	Mountain (462)	Hill (2,473)	Terai (2,945)
Female Sterilization	10.4	31.9	60.3
Vasectomy	10.6	34.6	45.4
Pill	11.4	29.9	23.2
Condom	7.1	17.6	11.2
Injectable	1.9	8.3	10.7
IUD	1.9	8.7	9.2
Traditional	0.3	0.3	2.6
Others	0.3	0.3	0.4

Note: The actual n upon which a cell percentage was calculated in this table may differ slightly from the n shown in parentheses in each column heading due to nonresponse.

It should be further noted that, even for the three most widely known methods, knowledge of each one does not exceed 12 percent in the Mountain region. In fact, knowledge is lowest in the Mountain region for each method listed. The lower levels in the Mountain region may reflect the fact that family planning program activities have penetrated into this area only recently, whereas program efforts have been carried out in the Hills and Terai for a longer time.

Table 6.8 shows that women from the Mid Western and Far Western development regions had considerably lower levels of knowledge for female sterilization, vasectomy, and the pill than the other three development regions. The former regions are, generally speaking, the least developed in Nepal. Respondents from the Central development region had the highest knowledge of female sterilization (57 percent) and vasectomy (49 percent). For all the remaining methods, women from the Eastern development region had the highest levels of knowledge.

Table 6.8 Percent Distribution of Currently Married Women 15-49 Years of Age by Development Region and Knowledge of Specific Family Planning Methods, Nepal, 1981

<u>Method</u>	<u>Development Region</u>				
	<u>Eastern (1,244)</u>	<u>Central (1,967)</u>	<u>Western (1,194)</u>	<u>Mid Western (656)</u>	<u>Far Western (818)</u>
Female Sterilization	50.5	57.0	48.6	16.4	21.4
Vasectomy	40.3	48.7	47.1	12.4	17.0
Pill	31.1	26.3	26.7	18.5	16.2
Condom	16.1	13.4	13.4	12.0	11.6
Injectable	15.1	8.7	11.0	3.1	2.2
IUD	13.3	8.0	8.9	5.9	3.4
Traditional	6.3	0.3	0.2	0.0	0.0
Others	1.3	0.2	0.2	0.0	0.0

Note: The actual n upon which a cell percentage was calculated in this table may differ slightly from the n shown in parentheses in each column heading due to nonresponse.

For both respondents and their husbands, as the level of education increases, so does knowledge of each specific family planning method (Tables 6.9 and 6.10). Of those women who have completed the secondary level of education, nearly 100 percent are aware of sterilization. Even in the case of the condom, more than 94 percent of women who have completed the secondary level of education knew the method. The numbers of women in the four educated subgroups are small, so it is possible that in a larger sample, percentages might vary considerably from those shown. For each method, the respondent's education also seems to have a greater impact than the husband's education on the level of contraceptive knowledge, as the percentage knowing a specific method is higher for the respondents than for the husbands at each educational level.

Number of Methods Known

It was shown in the previous section that a large proportion of currently married women, 48 percent, have no knowledge of contraceptives at all. In this section, the focus will be on the number of methods Nepalese women know. Knowledge of traditional and other methods were included in this analysis. Table 6.11 (bottom row) shows that 39 percent know one, two, or three methods, and about 13 percent know four or more methods. Differences in the number of methods known were examined by number of living children, by residence, by geographic region, and by development region.

Table 6.11 shows that as the number of living children increases the proportion of women who know one to three methods also increases slightly, from 37 percent for women with no children to 43 percent for women with seven or more children; however, there is less change in the proportion knowing four or more methods as the number of children increases.

There is a sharp difference in the number of methods known on the part of urban women, as compared to rural women (Table 6.12). A little more than 48 percent of the currently married women from urban areas know four or more methods, whereas in the case of rural women, only

Table 6.9 Percent Distribution of Currently Married Women 15-49 Years of Age by Level of Completed Education and Knowledge of Specific Family Planning Methods, Nepal, 1981

Method	Education				
	Illiterate (5,448)	Literate (149)	Primary (110)	Middle, Secondary (125)	Completed Secondary (43)
Female Sterilization	41.6	70.6	78.1	87.3	99.5
Vasectomy	35.3	64.7	64.9	84.1	99.5
Pill	21.9	54.2	57.0	79.1	94.5
Condom	10.5	40.5	38.5	64.7	94.3
Injectable	6.4	32.5	23.4	53.1	84.3
IUD	5.5	33.8	33.5	57.0	88.5
Traditional	1.1	5.0	6.0	5.8	11.8
Others	0.3	1.5	2.0	2.1	5.2

Note: The actual n upon which a cell percentage was calculated in this table may differ slightly from the n shown in parentheses in each column heading due to nonresponse.

Table 6.10 Percent Distribution of Currently Married Women 15-49 Years of Age by Husband's Level of Completed Education and Knowledge of Specific Family Planning Methods, Nepal, 1981

<u>Method</u>	<u>Husband's Education</u>				
	<u>Illiterate (3,279)</u>	<u>Literate (1,049)</u>	<u>Primary (516)</u>	<u>Middle, Secondary (706)</u>	<u>Completed Secondary (290)</u>
Female Sterilization	36.9	43.8	49.2	61.8	83.3
Vasectomy	29.5	41.7	39.7	55.8	79.8
Pill	16.2	29.5	29.0	40.5	68.8
Condom	6.7	15.1	14.8	24.6	58.4
Injectable	4.0	8.3	8.2	18.1	47.8
IUD	2.7	8.6	8.8	17.6	50.4
Traditional	1.0	1.3	1.5	2.8	4.7
Others	0.2	0.4	0.2	0.5	2.4

Note: The actual n upon which a cell percentage was calculated in this table may differ slightly from the n shown in parentheses in each column heading due to nonresponse.

Table 6.11 Percent Distribution of Currently Married Women
15-49 Years of Age by Number of Contraceptive
Methods Known, Nepal, 1981

<u>Number of Living Children</u>	<u>Total (N)</u>	<u>Number of Methods Known</u>		
		<u>0</u>	<u>1-3</u>	<u>4-8</u>
0 - 2	3,261	51.2	37.1	11.7
3 - 4	1,638	45.5	40.3	14.2
5 - 6	770	44.7	41.3	13.9
7+	197	41.1	43.3	15.6
All	5,836	48.4	38.8	12.8

Table 6.12 Percent Distribution of Currently Married Women
15-49 Years of Age by Type of Residence and
Number of Contraceptive Methods Known, Nepal, 1981

<u>Residence</u>	<u>Total (N)</u>	<u>Number of Methods Known</u>		
		<u>0</u>	<u>1-3</u>	<u>4-8</u>
Urban	327	25.0	27.0	48.1
Rural	5,511	49.8	39.5	10.7

about 11 percent of the currently married women know four or more methods of contraception. Only one-fourth of urban respondents had no knowledge of contraceptives at all.

It is clear from Table 6.13 that the number of methods known varies by geographic region. The proportion of Terai women knowing of one to three methods is 50 percent compared to figures for the Hill and Mountain regions of 30 percent and 16 percent respectively. Only 4 percent of women in the Mountain region know four or more methods, compared to 14 percent of women in the Hill region and 13 percent in the Terai region.

Table 6.13 Percent Distribution of Currently Married Women
15-49 Years of Age by Geographic Region and Number
of Contraceptive Methods Known, Nepal, 1981

<u>Region</u>	<u>Total (N)</u>	<u>Number of Methods Known</u>		
		<u>0</u>	<u>1-3</u>	<u>4-8</u>
Mountain	461	79.8	16.4	3.8
Hill	2,453	56.5	29.5	14.0
Terai	2,925	36.7	50.1	13.2

Examining the number of methods known by development region, women from the Central development region are more likely to know one, two, or three methods (Table 6.14). Women from the Eastern development region are more likely than women from the other development regions to know four or more methods. The previous section discussed the fact that women from the Mid Western and Far Western regions have lower knowledge levels of specific contraceptives compared to the other development

Table 6.14 Percent Distribution of Currently Married Women
by Development Region and Number of Contraceptive
Methods Known, Nepal, 1981

<u>Development Region</u>	<u>Total (N)</u>	<u>Number of Methods Known</u>		
		<u>0</u>	<u>1-3</u>	<u>4-8</u>
Eastern	1,223	42.0	39.5	18.5
Central	1,952	37.7	49.7	12.6
Western	1,192	43.6	42.6	13.8
Mid Western	656	76.6	14.1	9.2
Far Western	816	67.8	25.9	6.3
Total	5,839	48.4	38.8	12.8

regions. Similarly, a greater proportion of women in the Mid Western and Far Western development regions know no method at all, compared to the other development regions.

Trends in the Level of Contraceptive Knowledge

As mentioned previously, national data on contraceptive knowledge can be compared over the five-year period 1976-1981 using statistics from the NFS and the NCPS. Figures 6.2 and 6.3 compare the two data

Figure 6.2 Percent of Currently Married Women 15-49 Years Old Who Know a Contraceptive Method by Age, Nepal, NFS 1976^a and NCPS 1981^b

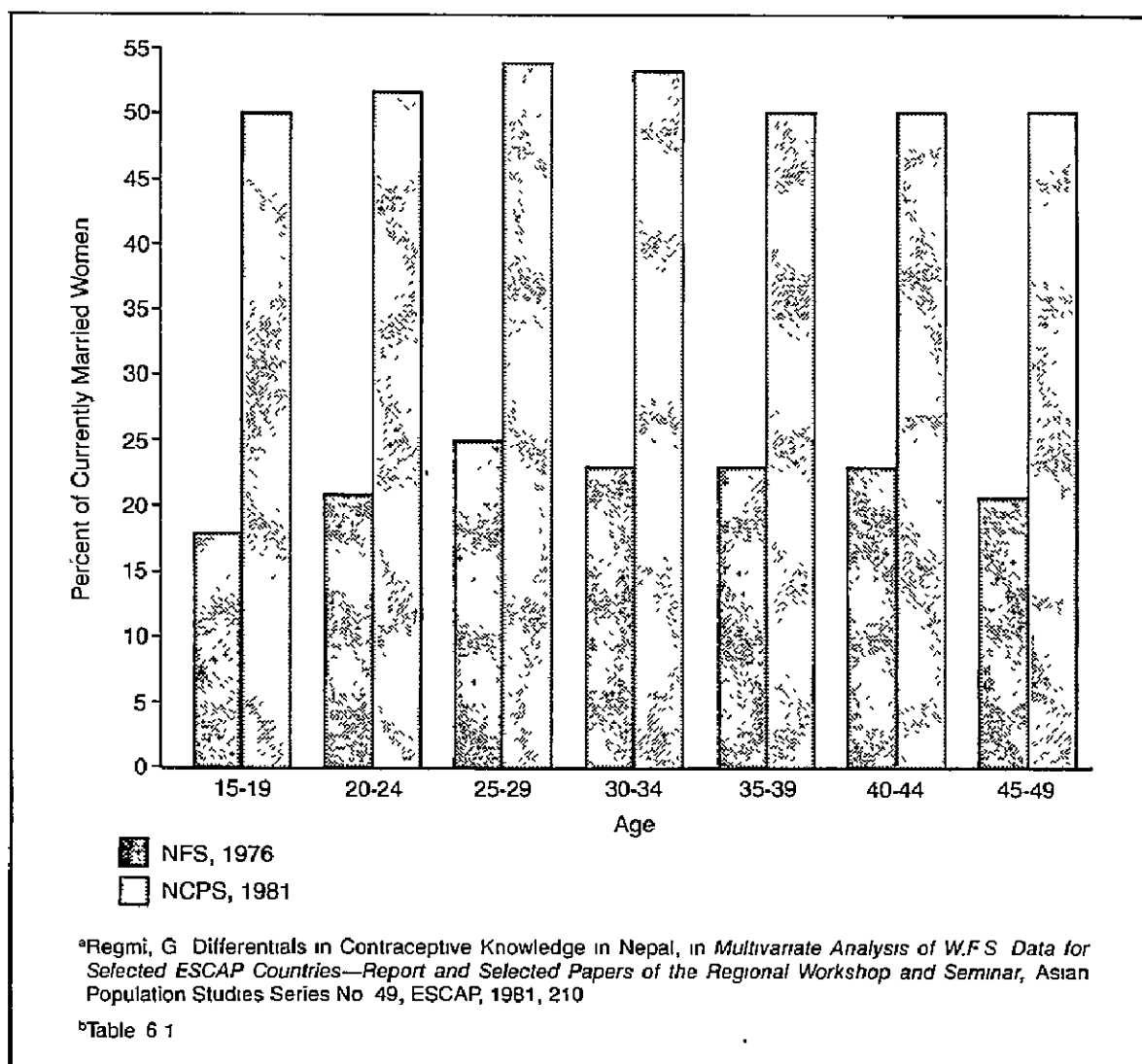
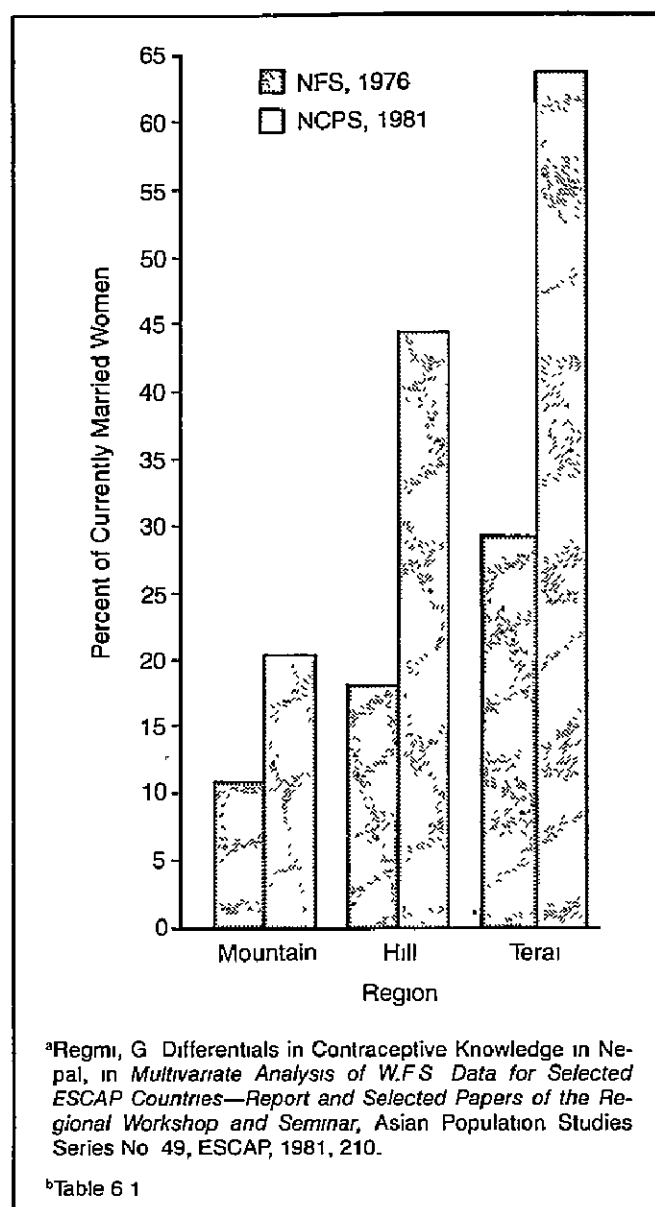


Figure 6.3 Percent of Currently Married Women 15-49 Years Old Who Know a Contraceptive Method by Geographic Region, Nepal, NFS 1976^a and NCPS 1981^b



sets to illustrate the trends in contraceptive knowledge levels over that five-year period.

As mentioned earlier, the level of contraceptive knowledge has changed positively by more than 100 percent since 1976. Further, the

level of knowledge has increased in virtually all age groups (Figure 6.2). Change by geographic region, however, has not been as consistent, as Figure 6.3 illustrates. Although the level of contraceptive knowledge doubled in the Terai and Hill regions, the increase was smaller for the Mountain region.

Knowledge levels changed most dramatically for male and female sterilization. The data for the NFS and NCPS are presented in Table 6.15, which shows positive changes for the pill, condom, and IUD as well as sterilization.

Table 6.15 Percent Distribution of Currently Married Women 15-49 Years of Age Who Know Specific Family Planning Methods, Nepal, 1976 and 1981

<u>Method</u>	<u>NFS 1976</u>	<u>NCPS 1981</u>
Female Sterilization	13.3	44.4
Vasectomy	16.3	38.1
Pill	12.5	25.1
Condom	5.0	13.6
IUD	6.3	8.4

Note: NFS data are unweighted. As the weights were close to 1, distortion of the NFS percents is minimal.

Summary

The NCPS found that 52 percent of currently married women knew at least one modern method of family planning. Women less than 35 years of age were slightly more likely to know some method than older women. Knowledge of family planning was strongly associated with being literate and living in urban areas. Knowledge was highest for respondents living

in the Terai region, followed by the Hill region and then the Mountain region. Knowledge in the Mid Western and Far Western development regions was considerably lower than in the Eastern, Central, and Western regions. Women working in non-agricultural occupations were more likely to know a method than either women in agriculture or not economically active. There was a modest positive association between knowledge and number of living children. With the exception of age, similar trends were also found for knowledge of specific methods.

CHAPTER 7

USE OF CONTRACEPTIVE METHODS

Introduction

This chapter presents the survey's findings about both ever use and current use of modern methods of family planning in Nepal. The analysis of ever use focuses on the tendency to discontinue use of contraception and the influence of past experience with specific methods on the choice of the current method.

The level of current use in the NCPS is compared with the NFS, and the characteristics of users are described. Additional analysis finds that users can be distinguished from nonusers on a number of social and demographic factors. The analysis then shifts to examine only current users of specific methods -- the method mix, and differentials by region, residence, age, and fertility-related factors. Many of the results presented in these sections suggest that family planning is used more for limiting than spacing births at this time in Nepal.

The last two sections of the analysis in this chapter examine the reasons why women who know about family planning are not using any method, and what their intentions are about use sometime in the future.

Ever Use of Contraceptives

In the NCPS interview, questions on ever use of contraception served as a transition between questions on knowledge of methods and current use. The utility of ever use rates in Nepal is somewhat limited by the relatively low level of overall family planning use. However, the data on ever use provide some insight into the historical patterns of methods used, which should help in understanding Nepal's family planning experience.

The overall rate of ever use of modern methods among currently married women was found to be 8.6 percent. The Nepal Fertility Survey found an ever use rate of 3.7 percent in 1976. The comparable rates by method are shown in Table 7.1.¹ The substantial increases in the percentages of women who have used permanent methods (male and female

¹ A clarification of references to users of male methods in discussions of ever use and current use of specific methods in this chapter may be necessary. Clearly, the actual user of condom or vasectomy is the husband of the respondent, and the respondent is protected from pregnancy by her husband's use of contraception. Often, it is really the husband who chooses to use a male method and obtains it.

Table 7.1 Percent Ever Using Family Planning Among Currently Married Women 15-49 Years of Age by Method, Nepal, 1976 and 1981

<u>Method</u>	NFS 1976 (5,501)	NCPS 1981 (5,876)	% Change
Female Sterilization	0.1*	2.4	+230.0
Vasectomy	1.5	2.9	+ 93.3
Pill	1.9	3.1	+ 63.2
Condom	1.2	1.2	0.0
Injectable	--	0.4	--
IUD	0.2*	0.2*	0.0
All Modern Methods	3.7	8.6	+132.0

Notes: *Less than 25 women.

--Not available.

The actual n upon which a cell percentage was calculated in this table may differ slightly from the n shown in parentheses in each column heading due to non-response about ever use of a specific method.

sterilization) are most encouraging. The pill is the only temporary method that has been used by an increasing proportion of women.

The patterns of ever use by age and method are presented in Table 7.2. Ever use is highest among women 30-39. Sterilization is relied on more heavily by the older age groups than by women under 30. Temporary methods are slightly more popular among younger women.

Because of the low level of contraceptive use in Nepal, there is little difference between ever and current use in terms of the social and geographic variables that influence them. A more relevant and detailed analysis of these variables is presented below in the section on "Current Use of Contraceptives."

Table 7.2 Percent Ever Using Family Planning Among Currently Married Women by Age and Specific Method, Nepal, 1981

<u>Method</u>	<u>Age</u>		
	<u>15 - 29</u> <u>(3,106)</u>	<u>30 - 39</u> <u>(1,751)</u>	<u>40 - 49</u> <u>(1,019)</u>
Female Sterilization	1.3	3.6	3.4
Vasectomy	1.2	4.9	4.7
Pill	2.5	4.0	3.2
Condom	1.3	1.4	0.6*
Injectable	0.3*	0.4*	0.4*
IUD	0.1*	0.2*	0.4*
All Modern Methods	5.8	12.2	10.9

Notes: *Less than 25 women.

The actual n upon which a cell percentage was calculated in this table may differ slightly from the n shown in parentheses in each column heading due to non-response about ever use of a specific method.

The historical patterns of method use are also measurable by comparing past use and current use. Table 7.3 presents data on current use status of women who have ever used selected methods. There were too few ever users of the IUD and injectables to allow analysis. However, some patterns emerged. Among women who have used the pill in the past, 36 percent are currently using the pill, another 26 percent are using some other method now, and 38 percent have discontinued all contraceptive use. A similar pattern is observed for the condom. Total discontinued ever users (that is, those who discontinued all use plus those who shifted to other methods) are 64 percent for the pill and 66 percent for the condom.

It is also possible to study current use of specific methods in light of methods used in the past. For current users of the pill, 9 percent had used condoms in the past (Table 7.4). For current users of

Table 7.3 Percent Distribution of Currently Married Women 15-49 Years of Age Who Have Ever Used Selected Family Planning Methods by Current Method Use, Nepal, 1981

<u>Current Method</u>	<u>Method Ever Used</u>	
	<u>Pill</u>	<u>Condom</u>
Female Sterilization	9.5	4.1
Vasectomy	13.3*	16.2*
Pill	35.9	7.7
Condom	2.4*	33.6*
Injectable	0.4*	0.0
IUD	0.4*	0.0
Not Using	38.0	38.1
Total (N)	175	70

Note: *Less than 25 women.

condoms, about 18 percent had used pills (less than 25 women). For current users of female sterilization, 16 percent had used some other method before being sterilized. For current users of male sterilization 17 percent had previous experience with contraception. It is apparent from these data that Nepalese women do not move easily between methods.

There also appears to be no progression of method use leading up to sterilization. At least 83 percent of all sterilization users had used no other method before accepting sterilization (Table 7.4). This pattern may be due to the relatively greater availability of sterilization and a common view among Nepalese that family planning is used only to terminate fertility.

Table 7.4 Percent Distribution of Currently Married Women 15-49 Years of Age Who Are Currently Using Selected Family Planning Methods by Methods Ever Used, Nepal, 1981

<u>Method Ever Used</u>	<u>Current Method</u>			
	<u>Female Sterilization</u>	<u>Vasectomy</u>	<u>Pill</u>	<u>Condom</u>
Female Sterilization only	84.4	--	--	--
Vasectomy only	--	83.0	--	--
Pill only	10.3*	8.2*	90.4	--
Pill and Condom	0.5*	4.4*	8.5*	18.1*
Pill and other*	1.1*	0.9*	1.1*	--
Condom only	1.4*	2.0*	--	80.0*
Condom and other	0.2*	0.3*	--	0.9*
Other only	2.2	1.3*	--	--
Total (N)	138	170	63	23

Note: *Less than 25 women.

As mentioned earlier, ever use measures have less relevance in countries with relatively low rates of contraceptive use. The following detailed analysis of current contraceptive use shows more clearly the patterns and nature of family planning practice in Nepal.

Current Use of Contraceptives

One of the prime objectives of this survey was to estimate the rate of contraceptive use among currently married women aged 15-49. Those women who had heard about any family planning methods were asked whether or not they were currently using any method. The survey shows that 6.8 percent were currently using modern contraceptive methods² in 1981. According to the Nepal Fertility Survey, the rate of current use of modern methods by currently married women in 1976 was only 2.3 percent. Thus the contraceptive prevalence rate has almost tripled within the five-year period.

Women 30-39 years old were more likely to use contraception than either younger or older women, as Table 7.5 shows. However, women aged 30-39 are only slightly more likely to use modern contraception than women aged 40-49. This pattern is probably related to the fact that as age increases, respondents are more likely to have had the number of children they desire (see Table 5.11). Consequently, relatively older women are more prone to use contraception than younger women, and they use contraception to limit births.

From a geographical perspective, the rate of contraceptive use is highest (8 percent) among Terai women (Table 7.5). Health and commercial facilities are more accessible in the Terai region. Most of the Terai districts are linked with roads, and the land is generally flat. Transportation is more difficult in the Mountain and Hill regions because of

²The one respondent who was currently using a traditional method is not included in the contraceptive prevalence rate.

Table 7.5 Percent Currently Using Family Planning Among Currently Married Women 15-49 Years of Age by Selected Characteristics, Nepal 1981

Characteristic	Total (N)	Percent Currently Using a Modern Method
<u>Age</u>		
15-29	3,106	3.9
30-39	1,751	10.5
40-49	1,019	9.6
<u>Geographic Region</u>		
Mountain	462	5.4
Hill	2,470	6.2
Terai	2,944	7.6
<u>Type of Residence</u>		
Urban	335	23.5
Rural	5,541	5.8
<u>Development Region</u>		
Eastern	1,241	7.5
Central	1,967	6.0
Western	1,194	8.7
Mid Western	656	4.5
Far Western	817	7.0
<u>Education</u> ¹		
Illiterate	5,444	5.7
Literate	149	16.1*
Primary	110	16.6*
Middle, Secondary	125	25.7
Completed Secondary	43	35.6*
<u>Husband's Education</u> ¹		
Illiterate	3,277	3.3
Literate	1,048	9.7
Primary	516	6.0
Middle, Secondary	706	11.5
Completed Secondary	290	26.7
<u>Working Status</u>		
Working	3,215	5.1
Not Working	2,653	8.9
<u>Occupation</u>		
Agriculture	2,618	3.9
Non-agriculture	597	10.5
Not Working	2,653	8.9

*Less than 25 women.

¹ Refer to footnote 3 of Table 4.2 for the meaning of the educational levels.

the terrain and lack of roads. The Terai is also more urbanized and advanced in development. It has better hospitals and other health facilities. Therefore contraceptive services, especially surgical contraception, are easily and regularly available in this region. These are some of the factors that may have caused the higher contraceptive prevalence rate among Terai women. Despite the fact that the Mountain and Hill regions are less developed compared to the Terai region, the regional differences in contraceptive use are not nearly as large as the regional differences in the level of family planning knowledge (see Table 6.1).

Table 7.5 also shows some variation in the rate of contraceptive use by development region. The Western development region has the highest rate (9 percent), double the prevalence rate of 4 percent for the Mid Western development region. Inasmuch as socio-economic development and the communications system vary among the development regions, it is not surprising that the contraceptive prevalence rates are also different. Seven out of the 16 districts in the Western development region are linked with all-weather roads, whereas only one or two of the 15 districts of the Mid Western development region have roads. Limited hospital facilities, difficulty in communications, and a relatively lower level of economic development may contribute to the lower acceptance rate of contraceptives that is found in the Mid Western development region.

Another of the possible reasons for the two-fold difference in contraceptive use found between these two regions may be that family planning services have been more widely available in the Western region compared to the Mid Western region since the beginning of the program. When the family planning program was expanded to 24 districts in 1969, this number included five districts in the Western region and two in the Mid Western regions.

Comparison of the rankings of the development regions on contraceptive prevalence and knowledge reveals that the regions differ in rank

order on these factors (see Tables 6.1 and 7.5). The Central region, for example, has the highest level of knowledge but ranks fourth in current contraceptive use. The Mid Western region was lowest on both knowledge and use. However, since the prevalence levels for all regions are low, this finding may not have much practical significance.

The urban-rural distribution of current users is also shown in Table 7.5. About 24 percent of urban women were using a modern contraceptive method in 1981, whereas less than 6 percent of rural women were users. The reasons for the lower contraceptive use rate among rural women can be attributed to many socio-economic factors including lack of education and medical facilities, poor transportation, and the relatively poorer economic conditions. However, as the majority of Nepal's people (about 95 percent) reside in rural areas, it is essential to promote family planning services in these areas to achieve the ultimate goal of reducing the fertility of Nepalese women.

The rate of contraceptive use was found to be 5 percent among working women who had some job in addition to their regular household work, but the rate among women who did not work outside their home was 9 percent (also in Table 7.5). Usually women who belong to the upper and middle class do not work outside their homes.³ However, they are aware of the importance of limiting their family size to maintain their standard of living, and thus use family planning. Since both residence and social class (indicated by husband's education) are related to contraceptive use, additional analysis was performed to see if one of these factors accounted for the association of the other with contraceptive use. Table 7.6 shows that the original relationships persist, that is, there are conjoint effects of both factors on contraceptive use. Urban

³Using husband's education as a substitute measure of social class, it can be shown that respondents whose husbands have more education tend to work less often than women whose husbands have little education or are illiterate. See Appendix 15.

women use contraception more than rural women regardless of husband's educational level (compare, for example, 28 percent urban women with literate husbands with 10 percent for rural women with literate husbands). Likewise, the educational differential is still evident for both urban and rural women.

Table 7.6 Current Use of Contraception by Husband's Education and Type of Residence for Currently Married Women 15-49 Years of Age, Nepal, 1981

<u>Residence</u>	<u>Husband's Education</u>	
	<u>Illiterate</u>	<u>Literate</u>
Urban	9.4%* (82)	27.9% (70)
Rural	3.2% (3,195)	9.6% (2,309)

Notes: The numerical base for the percentage in each cell is shown in parentheses.

*Less than 25 women.

Since Nepal is a predominantly agricultural country, and the majority of women belong to the rural masses, the low prevalence rate among working women seems consistent with the low prevalence rate among rural women. Further analysis, presented in Table 7.7, revealed that residence and working status both influence Nepalese women's use of contraception. In both urban and rural areas, women who are not working are more likely to use contraception than women who work outside the home. At the same time, urban women practice family planning more than rural women whether they are working or not. (Small numbers in table cells limit the meaningfulness of analyzing by occupation instead of working status.)

The level of education of both husbands and wives seems to be another important factor affecting the rate of contraceptive use. As can be seen in Table 7.5, the rate of contraceptive use is higher as the

Table 7.7 Current Use of Contraception by Working Status
and Type of Residence for Currently Married
Women 15-49 Years of Age, Nepal, 1981

<u>Residence</u>	<u>Working Status</u>	
	<u>Working</u>	<u>Not Working</u>
Urban	18.7%* (122)	26.3% (213)
Rural	4.6% (3,094)	7.4% (2,443)

Notes: The numerical base for the percentage in each cell is shown in parentheses.

*Less than 25 women.

level of education rises for both respondents and their husbands. Literate women (all educational categories other than illiterate in the table) were found to be three times more likely to be using modern contraceptive methods (22 percent) than illiterate women.

The number of living children was found to be one of the most important factors associated with the acceptance of contraceptive methods among Nepalese women. As Table 7.8 shows, current use of contraception continues to increase as the number of living children increases. It was 2 percent among women who had up to two children, 12 percent for women with three to four living children, and 14 percent for women with five to six children.

Table 7.9 further illustrates that unless Nepalese women have the desired number of living children, they are not ready to practice contraception. In other words, they adopt family planning to limit family size, not to space births. For example, 18 percent of women with three or four children who do not want any more children are currently using a modern family planning method, compared with only 3 percent of women

Table 7.8 Percent Currently Using Family Planning Among
Currently Married Women 15-49 Years of Age by
Selected Fertility Variables, Nepal, 1981

<u>Fertility Variable</u>	<u>Total (N)</u>	<u>Percent Currently Using a Modern Method</u>
<u>Number of Living Children</u>		
0 - 2	3,247	2.0
3 - 4	1,650	11.8
5 - 6	777	13.7
7+	199	17.9
<u>Number of Living Sons</u>		
0	1,887	0.7*
1	1,755	4.8
2	1,287	11.5
3	595	17.9
4+	336	14.7
<u>Number of Living Daughters</u>		
0	2,105	2.7
1	1,796	7.6
2	1,147	9.7
3	485	11.5
4+	327	12.4

*Less than 25 women.

with the same number of children but who want more. There is hardly any difference in levels of contraceptive use among women who want more children, regardless of actual family size.

A further breakdown of current users by number of living sons and daughters is presented in Table 7.8. The rate of contraceptive use was below 1 percent among women who had no living son, increasing to 18

Table 7.9 Current Use of Contraception by Desire for More Children and Number of Living Children for Currently Married Women 15-49 Years of Age, Nepal, 1981

<u>Living Children</u>	<u>Desire for More Children</u>		
	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
0 - 2	1.1% (2,489)	6.3% (475)	2.5%* (283)
3 - 4	3.0%* (467)	17.8% (1,002)	1.8%* (181)
5+	2.5%* (67)	16.2% (861)	1.9%* (47)

Notes: The numerical base for the percentage in each cell is shown in parentheses.

*Less than 25 women.

percent for women who had three living sons. Comparable rates for women who had no living daughter versus three living daughters were 3 percent and 12 percent respectively. These data suggest that the number of living sons may be slightly more important than the number of living daughters in the decision to use contraception. As the analysis in Chapter 5 pointed out, the male child is traditionally more valued than the female child in Nepal from both a social and economic viewpoint.

Comparisons of Current Users and Nonusers of Contraceptives

It is important to understand which types of women are presently using family planning in Nepal and whether these women can be distinguished from women who are not using any contraceptive method. The data presented in Table 7.10 generally suggest that a particular stratum of the population is adopting family planning in Nepal. Users tend to live in urban areas (20 percent) more than nonusers (5 percent). Both users and their husbands are literate more often than nonusers. Current users are also

Table 7.10 Background Characteristics of Currently Married Contraceptive Users and Non-Users 15-49 Years of Age, Nepal 1981

Characteristic	Contraceptive Status	
	User	Non-user
<u>Age</u>		
15-29	29.8	54.6
30-39	45.9	28.6
40-49	24.3	16.8
Total (N)	402	5,473
<u>Geographic Region</u>		
Mountain	6.3	8.0
Hill	38.3	42.3
Teral	55.4	49.7
Total (N)	402	5,473
<u>Type of Residence</u>		
Urban	19.6	4.7
Rural	80.4	95.3
Total (N)	402	5,473
<u>Development Region</u>		
Eastern	23.2	21.0
Central	29.4	33.8
Western	25.9	19.9
Mid Western	7.3	11.4
Far Western	14.3	13.9
Total (N)	402	5,473
<u>Education¹</u>		
Illiterate	77.6	93.8
Literate	6.0*	2.3
Primary	4.5*	1.7
Middle, Secondary	8.0	1.7
Completed Secondary	3.8*	0.5
Total (N)	402	5,469
<u>Husband's Education¹</u>		
Illiterate	27.3	58.3
Literate	25.4	17.4
Primary	7.7	8.9
Middle, Secondary	20.3	11.5
Completed Secondary	19.3	3.9
Total (N)	401	5,435
<u>Working Status</u>		
Working	41.0	55.8
Not Working	59.0	44.2
Total (N)	402	5,466
<u>Occupation</u>		
Agriculture	25.5	46.0
Non-agriculture	15.5	9.8
Not Working	59.0	44.2
Total (N)	402	5,466

*Less than 25 women.

¹Refer to footnote 3 of Table 4.2 for the meaning of the educational categories.

less likely to be working, and if they are working, they tend to have non-agricultural jobs more than nonusers. When urban and rural women are examined separately, these patterns for working status and occupation persist. Contraceptive users are different from nonusers in other ways as well.

Users are more likely to be older women, compared to nonusers. The NCPS found that only about 30 percent of users are under 30, but almost 55 percent of nonusers are in that age group.

Table 7.11 shows that the fertility status and intentions of current users also differ from nonusers. Only 16 percent of users have two or fewer children compared to 58 percent of nonusers. In addition, users desire to have additional children less often (11 percent) than nonusers (54 percent). These comparisons lend support to the earlier conclusion that Nepalese women begin to practice family planning in order to limit family size when they have completed childbearing rather than to postpone future births while their families are growing.

Current Use by Specific Methods

The different types of contraceptives used by currently married women are shown in Table 7.12. Among currently married women, the proportion of vasectomy acceptors is the highest (42 percent), followed by female sterilization (34 percent), and the pill (16 percent). The condom was chosen by 6 percent of current users. Only few women chose injectables and the IUD.

Figures for male and female sterilization seem to be quite consistent with service statistics. With the renewed emphasis on sterilization activities after the 1981 NCPS, one can expect an increase in the use of these methods in future surveys. Figures for current use of injectables and IUDs are also more or less consistent with service statistics. In view of the fact that injectables and IUDs are clinical methods that require a medical examination and are available only at facilities where

Table 7.11 Number of Living Children and Desire for More Children of Currently Married Contraceptive Users and Non-users 15-49 Years of Age, Nepal, 1981

<u>Fertility Variable</u>	<u>Contraceptive Status</u>	
	<u>User</u>	<u>Non-user</u>
<u>Number of Living Children</u>		
0 - 2	16.0	58.2
3 - 4	48.6	26.6
5+	35.4	15.2
Total (N)	402	5,471
<u>Desire for More Children</u>		
Yes	10.7	54.5
No	86.5	36.4
Don't Know	2.8*	9.1
Total (N)	402	5,472

*Less than 25 women.

trained senior female paramedicals are posted, it is not surprising that the proportion of women using these methods is quite low. The data on condom and pill users are less predictable. Service statistics indicate that condom and pill users constitute about 60 percent and 25 percent, respectively, of the new acceptors being recruited every year, and sales figures through the Contraceptive Retail Sales Project support the relative importance of these two methods. However, the survey figures for users of the condom (6 percent) and the pill (16 percent) seem to be inconsistent.

This inconsistency may be due to bias in reporting on the part of the women interviewed, since most of the interviewers were male. Within the context of Nepalese society, it is possible that women are unwilling to talk about use of the condom to male interviewers.

Table 7.12 Percent Distribution of Currently Married Women 15-49 Years of Age Who Were Currently Using a Family Planning Method by Method, Nepal, 1981

<u>Method</u>	<u>Percent</u>
Female Sterilization	34.2
Vasectomy	42.2
Pill	15.6
Condom	5.8*
Injectable	1.1*
IUD	0.8*
Traditional	0.3*
Total (N)	404

*Less than 25 women.

The inconsistency could also be due to errors contained in the service statistics. However, since data regarding the magnitude and direction of errors in the service statistics are unavailable, it is difficult to estimate what proportion of the discrepancy is due to inaccuracies in the service statistics.

Part of the discrepancy could also be accounted for if the continuation rates for these methods were low. The continuation rate for the condom is not available, but the 1974 Acceptors Follow-up Survey (Ministry of Health 1976) provides a pill continuation rate using the life table technique. It was estimated that about 36 percent of pill users continue for up to a year. If the service statistics for pills were to be adjusted with this continuation rate, then the discrepancy between the survey results and service statistics would be somewhat reduced.

As can be seen from Table 7.13 the women in the 15-29 year-old age group are more likely to use the pill (23 percent) compared to women in the other age groups. Actually, more detailed analysis showed that these pill users are 20-29 and that women who are 15-19 do not use this method. Among users of family planning methods, the percentage using female sterilization is fairly evenly distributed among age groups. Current users of a contraceptive method in the 15-29 age group chose vasectomy less frequently (31 percent) than women 30 or older (about 47 percent).

Table 7.14 shows the distribution of current users by specific method and geographical region. Comparing across regions, it is clear from the table that among current users, the pill is used less in the Terai region (10 percent) than elsewhere; it is chosen the most by women in the Mountain region (35 percent). Female sterilization is the method used most often in the Terai (53 percent); vasectomy is the most popular method in the Hills and Mountains (58 and 40 percent, respectively).

Table 7.13 Percent Distribution of Currently Married Women 15-49 Years Old Who Were Using a Family Planning Method by Specific Method and Age, Nepal, 1981

<u>Method</u>	<u>Age</u>		
	<u>15-29</u>	<u>30-39</u>	<u>40-49</u>
Female Sterilization	33.4	34.5	35.1
Vasectomy	31.3	46.2	48.6
Pill	22.6	13.2*	11.7*
Condom	8.9*	4.5*	4.6*
Injectable	1.8*	1.2*	0.0
IUD	2.0*	0.5*	0.0
Total (N)	120	185	98

*Less than 25 women.

Of course, the popularity of a method is affected by a number of factors, including the availability and accessibility of the method, as well as the emphasis given to a particular method by the local family planning centers. As previously mentioned, relatively more emphasis has been placed on sterilization in the Terai area, due mainly to the availability of health facilities and personnel as well as ease of communication and transportation. By contrast, it is difficult to promote female sterilization in the Mountain region, where health facilities and personnel are scarce. Vasectomy, on the other hand, can be performed in a somewhat broader range of facilities, and this factor may explain why male sterilization is the most popular method (40 percent) in the Mountains.

In general, the distribution of methods used by urban and rural women is quite similar. However, there are some small differences in the use of female and male sterilization (see Table 7.15).

Table 7.14 Percent Distribution of Currently Married Women 15-49 Years Old Who Were Using a Family Planning Method by Specific Method and Geographic Region, Nepal, 1981

<u>Method</u>	<u>Region</u>		
	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>
Female Sterilization	10.0*	11.8*	52.6
Vasectomy	40.0*	58.4	31.5
Pill	35.0*	20.8	9.8*
Condom	10.0*	5.6*	5.5*
Injectable	5.0*	1.6*	0.3*
IUD	0.0	1.8*	0.2*
Total (N)	25	154	223

*Less than 25 women.

Table 7.15 Percent Distribution of Currently Married Women
15-49 Years Old Who Were Using a Family Planning
Method by Specific Method and Type of Residence,
Nepal, 1981

<u>Method</u>	<u>Residence</u>	
	<u>Urban</u>	<u>Rural</u>
Female Sterilization	36.3	33.9
Vasectomy	37.2	43.6
Pill	15.9*	15.6
Condom	5.8*	5.8
Injectable	2.3*	0.8*
IUD	2.6*	0.4*
Total (N)	79	324

*Less than 25 women.

The distribution of currently married women currently using specific methods by development region is summarized in Table 7.16. Whereas the percentage using sterilization (both male and female) ranges from 80 to 85 percent in the Eastern, Central, and Western development regions, this figure is substantially lower for the Mid Western (38 percent) and Far Western (62 percent) development regions. Although female sterilization camps have been held mostly in the Eastern, Central, and Western development regions, only in the Eastern region does the percentage of female sterilization users noticeably exceed male sterilization in the NCPS results.

From Table 7.17, it is clear that the proportion of users who choose permanent methods increases as the number of living children increases. Among respondents who have three or more living children and are currently using a family planning method, the proportion of women protected by sterilization (both male and female) exceeds 80 percent.

Table 7.16 Percent Distribution of Currently Married Women 15-49 Years Old Who Were Using a Family Planning Method by Specific Method and Development Region, Nepal, 1981

<u>Method</u>	<u>Development Region</u>				
	<u>Eastern</u>	<u>Central</u>	<u>Western</u>	<u>Mid Western</u>	<u>Far Western</u>
Female Sterilization	48.4	41.5	18.7*	21.4*	31.7*
Vasectomy	34.3	39.4	66.9	17.1*	29.9*
Pill	7.5*	9.9*	10.3*	47.9*	33.7*
Condom	8.8*	3.7*	3.9*	13.6*	4.8*
Injectable	0.7*	2.9*	0.2*	0.0	0.0
IUD	0.2*	2.6*	0.0	0.0	0.0
Total (N)	93	118	104	29	57

*Less than 25 women.

Table 7.17 Percent Distribution of Currently Married Women 15-49 Years of Age Who Were Using a Family Planning Method by Specific Method and Number of Living Children, Nepal, 1981

<u>Method</u>	<u>Number of Living Children</u>		
	<u>0 - 2</u>	<u>3 - 4</u>	<u>5+</u>
Female Sterilization	11.1*	34.2	45.0
Vasectomy	33.1*	48.0	38.8
Pill	42.3	9.5*	11.9*
Condom	9.4*	6.2*	3.7*
Injectable	1.4*	1.3*	0.6*
IUD	2.7*	0.8*	0.0
Total (N)	65	195	142

*Less than 25 women.

Table 7.18 examines the method currently used by desire for more children. Most of the respondents who do not want any more children (86 percent) are using permanent methods. These methods are used by only 13 percent of women who want more children. This pattern is quite consistent with the nature of the method used. In a few cases, respondents who said that they wanted to have more children were sterilized or their husbands were sterilized. This apparent inconsistency may relate to the fact that the respondent lost one or more of her children after sterilization. It is also possible that these respondents did not understand the question on desire for more children, which was asked before any questions on family planning.

Reasons for not Using Family Planning Methods

Women who had knowledge of family planning methods but were not currently using contraceptives and women who had discontinued using family planning methods were asked to identify their reasons for

Table 7.18 Percent Distribution of Currently Married Women 15-49 Years Old Who Were Using a Family Planning Method by Specific Method and Desire for More Children, Nepal, 1981

<u>Method</u>	<u>Desire for More Children</u>		
	<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
Female Sterilization	3.5*	39.2	2.0*
Vasectomy	9.3*	46.7	34.3*
Pill	63.8	9.7	15.1*
Condom	19.4*	3.2*	35.4*
Injectable	1.1*	0.7*	13.1*
IUD	2.9*	0.6*	0.0
Total (N)	43	348	11

*Less than 25 women.

choosing not to use contraceptives (Table 7.19). Nearly 24 percent stated that they did not need to use a method of family planning. This idea may have been based on any one of the following beliefs:

- these women no longer considered themselves to be fecund;
- their husbands may have been absent from the home for long periods of time;
- social pressure against pregnancy may be felt by women with married children.

Analysis of the NFS data (Jee 1981) pointed to the grandmother effect. Women with married children were found to have lower fertility than women whose children were not married. It has been suggested that

Table 7.19 Percent Distribution of Currently Married Women 15-49 Years of Age Who Were not Using Family Planning by Ever Use of Modern Methods and Reasons for Nonuse, Nepal, 1981

<u>Reasons</u>	<u>Ever Used Modern Method</u>		<u>All</u>
	<u>Yes</u>	<u>No¹</u>	
Desire more children	32.8	41.3	40.8
Health condition	21.0*	10.7	11.1
Family planning not available	4.0*	2.8	2.8
Family planning not needed	23.9*	23.7	23.9
Want son	9.4*	14.8	14.7
Others ²	9.0*	6.1	6.1
Don't know	0.0	0.6*	0.6*
Total (N)	99	2,521	2,620

¹ Respondents who knew a family planning method.

² Others include all the reasons not mentioned above and all combinations of those reasons.

*Less than 25 women.

women with grandchildren are discouraged by social pressure from becoming pregnant. In the absence of wide use of contraception, abstaining from sexual activity would be the main way to avoid pregnancy.

A majority of the women who responded to this question reported that they were not using a family planning method because they wanted more children. About 15 percent of the women who were not using a family planning method stated explicitly that they wanted a male child, and 41 percent simply said that they wanted more children. All responses were given with similar frequency by users and nonusers, with the exception of health conditions, cited as a reason for not using a family planning method twice as often by women who had discontinued use as by nonusers. (See Table 7.19.)

Table 7.20 provides a further breakdown of the reasons for discontinuation by former users. Former users of oral contraceptives cited the following reasons for discontinuing use about equally:

- desire for more children;
- health condition;
- belief that family planning was no longer needed.

More than half of the former condom users reported that they discontinued use because they desired more children; 19 percent cited the specific desire to have male children. The numbers of women who had used the IUD, injectables, and traditional and other methods are too small for meaningful analysis; the data are presented in Table 7.20 for information purposes only. It is interesting to note, however, that none of the former IUD users mentioned health conditions as a reason for nonuse, despite the fact that bleeding, discomfort, and other side effects are frequent complaints with IUDs.

Intentions for Future Use

In an effort to identify the variables affecting the decision to use family planning methods, the question, "Do you or your husband

Table 7.20 Percent Distribution of Currently Married Women 15-49 Years of Age Who Discontinued Contraceptive Use by Reasons for Nonuse and Methods Previously Used, Nepal, 1981

<u>Reasons</u>	<u>Method Ever Used Previously</u>					
	<u>Pill</u>	<u>Condom</u>	<u>IUD</u>	<u>Injectable</u>	<u>Traditional Method</u>	<u>Other Method</u>
Desire more children	27.6	52.9	11.7	15.9	0.0	31.2
Health condition	27.2	6.6	0.0	2.4	13.6	16.0
Family planning not available	4.0	4.3	32.4	0.0	0.0	0.0
Family planning not needed	27.1	13.2	50.0	50.0	29.6	48.6
Want son	5.3	18.7	5.9	2.4	29.6	2.9
Others ¹	8.8	4.3	0.0	29.3	27.2	0.0
Don't know	0.0	0.0	0.0	0.0	0.0	1.4
Total (N)	69	29	4	9	9	16

¹ Others include all the reasons not mentioned above and all combinations of those reasons.

Note: The reader is cautioned that all individual cell sizes in this table are less than 25.

intend to use any family planning method in the future?" was included in the survey. This question was administered to women who met both of the following conditions:

- they had knowledge of at least one method of contraception;
- they were not currently using any method of contraception.

Of those women who responded to this question, 27 percent indicated that they might use family planning in the future.

The responses of currently married women concerning their intentions about contraceptive use in the future are shown by age group in Table

7.21. The highest proportion of women (34 percent) intending to use contraceptives in the future were in the 20-24 age group. Among women 30-34 years of age, 30 percent of the women reported that they intended to use contraceptives in the future; the percentage then decreases with each succeeding age group down to 7 percent with the oldest age group (45-49 years). The "grandmother effect" (described in the previous section) or the belief that they are no longer fecund may explain the low percentage in the 45-49 year age group.

Over one-third (34 percent) of the women surveyed gave the response "don't know" to this question on future contraceptive use. One explanation for this answer could be that respondents interpreted the question to mean sterilization, rather than any method of family planning, temporary or permanent. If women believe family planning is synonymous with sterilization -- which is the most widely known and used method in Nepal -- it is understandable that many women would be uncertain about

Table 7.21 Percent Distribution of Currently Married Women 15-49 Years of Age by Intention to Use Family Planning and Age, Nepal, 1981

<u>Age</u>	<u>Total (N)</u>	<u>Intention for Future Use</u>		
		<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
15 - 19	300	27.3	25.6	47.0
20 - 24	582	34.2	24.5	41.3
25 - 29	597	32.7	35.0	32.3
30 - 34	409	30.0	40.3	29.7
35 - 39	293	17.9	51.0	31.1
40 - 44	236	12.1	62.6	25.3
45 - 49	163	6.7*	69.5	23.8
Total	2,581	26.8	38.9	34.3

*Less than 25 women.

future use. Another possible explanation may be that some women were particularly sensitive to this question when the interviewer was male, and may have been reluctant to give a definite answer. A third explanation may be that it is difficult for women to understand and respond to questions about their possible future actions.

These data were also analyzed according to geographic region, residence, and development region (Tables 7.22, 7.23, and 7.24). Positive intention for future use of contraceptives is slightly higher

Table 7.22 Percent Distribution of Currently Married Women 15-49 Years of Age by Intention to Use Family Planning and Geographical Region, Nepal, 1981

<u>Region</u>	<u>Total (N)</u>	<u>Intention for Future Use</u>		
		<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
Mountain	67	37.7	28.3*	34.0*
Hill	884	25.4	33.7	40.9
Teraí	1,631	27.1	42.2	30.8

*Less than 25 women.

Table 7.23 Percent Distribution of Currently Married Women 15-49 Years of Age by Intention to Use Family Planning and Type of Residence, Nepal, 1981

<u>Residence</u>	<u>Total (N)</u>	<u>Intention for Future Use</u>		
		<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
Urban	160	42.4	31.3	26.3
Rural	2,421	25.7	39.4	34.8

Table 7.24 Percent Distribution of Currently Married Women 15-49 Years of Age by Intention to Use Family Planning and Development Region, Nepal, 1981

Development Region	Total (N)	Intention for Future Use		
		Yes	No	Don't Know
Eastern	624	35.1	38.0	26.9
Central	1,086	18.6	42.8	38.6
Western	567	25.8	38.2	36.0
Mid Western	118	50.5	24.9	24.6
Far Western	188	34.8	30.4	34.8

in the Mountain region (38 percent) than in the Terai or Hills. A substantially larger portion of urban women (42 percent) intend to use a contraceptive method in the future than women in rural areas (26 percent). Women from the Mid Western development region responded positively more often than women in the other four development regions.

For both the respondent and her husband, higher educational attainment is associated with positive responses about intended use of contraception. A larger proportion of literate women say they intend to use contraception in the future (54 percent) compared to illiterate women (24 percent), as Table 7.25 shows. A strong positive relationship is seen in Table 7.26 for husband's education.

Finally, Table 7.27 compares the intention of women to use family planning by the type of work they do. A higher percentage of non-working women responded positively concerning their future use of contraceptive methods (34 percent) than women in both agricultural and non-agricultural work. As was pointed out earlier, both non-working women and women working in non-agricultural jobs in Nepal are generally from a higher socio-economic group than women working in agriculture and have similar

Table 7.25 Percent Distribution of Currently Married Women
15-49 Years of Age by Intention to Use Family
Planning and Respondent's Education, Nepal, 1981

<u>Education</u>	<u>Total (N)</u>	<u>Intention for Future Use</u>		
		<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
Illiterate	2,317	23.7	40.9	35.5
Literate	261	54.2	21.5	24.3

Table 7.26 Percent Distribution of Currently Married Women
15-49 Years of Age by Intention to Use Family
Planning and Husband's Education, Nepal, 1981

<u>Education</u>	<u>Total (N)</u>	<u>Intention for Future Use</u>		
		<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
Illiterate	1,268	18.3	44.6	37.2
Literate	467	28.2	37.7	34.2
Primary	260	29.7	35.9	34.4
Middle, Secondary	408	39.0	30.4	30.6
Completed Secondary	167	53.3	23.1	23.6

levels of literacy, which are higher than the literacy rate of agricultural workers. The correlation between education and occupation explains why the patterns are so similar here.

It is not possible to determine if the higher levels of "don't know" responses for illiterate, rural, and agriculturally employed women reflect true differences in intentions compared to literate, urban, non-working women, or difficulty in understanding the question as worded

Table 7.27 Percent Distribution of Currently Married Women 15-49 Years of Age by Intention to Use Family Planning and Occupation, Nepal, 1981

<u>Occupation</u>	<u>Total (N)</u>	<u>Intention for Future Use</u>		
		<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
Agriculture	1,114	19.3	36.7	44.1
Non-agriculture	345	26.6	44.1	29.4
Not Working	1,121	34.2	39.6	26.2

in the interview schedule. Large percentage differences -- from 15 to 20 percent -- were found between these two broad groups of women. For example, 44 percent of women working in agriculture gave a "don't know" response about future use compared to 26 percent of non-working women (Table 7.27).

Table 7.28 summarizes the results of analysis of the association between ever use of family planning and intentions for future use.

Table 7.28 Percent Distribution of Currently Married Women 15-49 Years of Age by Ever Use of a Family Planning Method and Intention to Use Family Planning in the Future, Nepal, 1981

<u>Ever Use of Family Planning</u>	<u>Total (N)</u>	<u>Intention for Future Use</u>		
		<u>Yes</u>	<u>No</u>	<u>Don't Know</u>
Yes	104	49.4	29.7	21.0*
No	2,477	25.8	39.3	34.9

*Less than 25 women.

Women who have ever used a method of contraception are about twice as likely to state they would use family planning sometime in the future as women who have not used family planning before.

Summary

The NCPS estimates that about 7 percent of currently married women were using a modern method of contraception at the time of the interview. Current users of family planning were typically over 30 years old, from urban areas, literate, and not working outside the home. Generally they already had three or more children and did not want to have any more. Contraceptive users tended to live in the Terai region somewhat more often than in other areas. In terms of development regions, the Western region was found to have the highest contraceptive prevalence rate. Evidence presented in this chapter leads to the conclusion that at this time, in general, Nepalese women adopt family planning to limit family size rather than to space births.

The methods chosen, given in order of highest to lowest, were vasectomy, female sterilization, pill, condom, and all others. As might be expected, the pill was chosen more by younger users, and sterilization by older users. Over 80 percent of users who had three or more children and 85 percent of users who did not want more children chose permanent methods (male and female sterilization).

Although there was little difference in method mix between urban and rural users, some variation by geographical region was found. Over half of the users from the Terai used female sterilization, but only 10 percent of users in other regions used this method.

The majority of the women responding to the question concerning reasons for nonuse of contraception stated that they were not using family planning methods because they desired more children. A large number of the respondents to this question believed that they did not need to use family planning methods. Health conditions were cited as a

reason for not currently using family planning methods more frequently by women who had ever used contraception than those who had not, and this problem was identified most often by former pill users.

With regard to the intentions to use family planning sometime in the future, women who responded that they might use family planning tended to be less than 30 years old, literate, not working, and residing in urban areas. Women who had used family planning in the past were more likely to intend future use than women who had never used any method before. Some caution in interpretation is necessary because respondents may have had problems in understanding this question.

CHAPTER 8

AVAILABILITY OF FAMILY PLANNING

Introduction

Besides factors such as knowledge, motivation, finances, and peer and family approval, another crucial element in the adoption of contraceptive practice is the availability of family planning services. This chapter focuses directly on the interface between clients or potential clients, and the providers of family planning services.

From a conceptual point of view, there are two aspects of availability -- the actual number of sources in a given location and the perceptions of the client population concerning the presence of sources in their vicinity. This distinction may be of importance in drawing conclusions about availability according to the various measurements of each aspect. It is safe to say that actual availability in Nepal is limited. Clinical methods are restricted to district hospitals or clinics attached to FP/MCH district offices, plus a very small number of clinics operated by nongovernmental organizations. (The reader may wish to refer to the sections describing the family planning delivery system in Chapter 1). Since the respondent's perceptions about availability are affected by numerous factors (for example, education, willingness to respond to the interviewer's questions, and differences between measured and perceived time), conclusions based on these data may agree or disagree with the low actual availability. The measurements of perceived availability in the NCPS are: knowledge of source for the methods known, type of source, mode of transportation, travel time to source, and perceived convenience.

Knowledge of a Source for Family Planning Methods

NCPS respondents who reported that they knew a particular method were asked if they knew where to get it. Those who answered affirmatively were then asked to name the source.

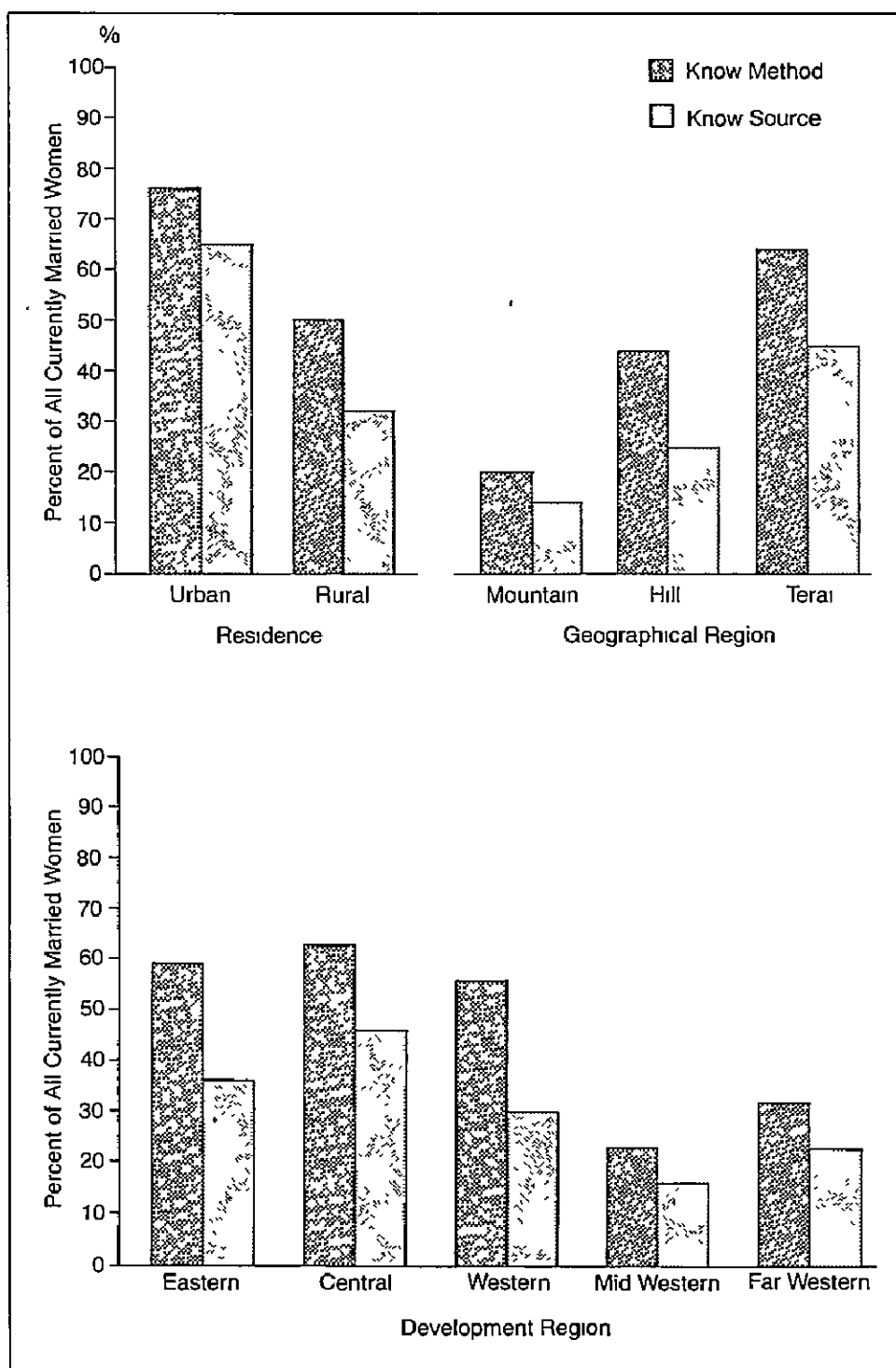
Among all the respondents in the NCPS, a smaller proportion (34 percent) knew of a source for a modern method of family planning than knew any modern method (52 percent). Figure 8.1 shows that this gap between method knowledge and source knowledge exists for women in both urban and rural areas and in the various geographical and development regions. The relative size of the gap also varies within categories of residence and region; it is smaller for urban than rural women, for example.

Additional analysis in Table 8.1 shows that effective knowledge, that is, the knowledge of a source for a specific method of which the respondent is aware, is about 50 percent for each modern method. Among the respondents who know about female sterilization, 59 percent stated they know a place to have the operation. This result is of particular significance for Nepal's family planning program. It may be extremely difficult for women to follow through on their motivation to adopt contraceptive practice, even when they are aware of a particular method,

Table 8.1 Method Knowledge, Source Knowledge, and Effective Knowledge of Specific Family Planning Methods for Currently Married Women 15-49 Years Old, Nepal, 1981

Method	Percent of All Women Who Know Method	Percent of All Women Who Know Source for Method	Percent of Women Knowing Method Who Also Know Source
Female Sterilization	44.4	26.2	59.1
Vasectomy	38.1	20.4	53.6
Pill	25.1	13.8	55.2
Condom	13.6	7.2	53.2
Injectables	9.0	4.5	50.4
IUD	8.4	4.3	51.5
All	51.9	34.3	66.0

Figure 8.1 Percentage of Currently Married Women 15-49 Years of Age who Know a Modern Family Planning Method and Source by Type of Residence, Geographical Region, and Development Region, Nepal, 1981



because they often do not know where to obtain it. The low levels of effective knowledge are a reflection of low actual availability; a woman may have heard of family planning, but there may be no source near her home.

Types of Sources for Specific Family Planning Methods

The types of sources named by women who knew specific methods are shown in Table 8.2.¹ Health posts or hospitals were mentioned by half

¹Users and nonusers have been combined in the tables on types of sources, mode of transportation, travel time, and perceived convenience. A later section compares users and nonusers separately.

Table 8.2 Percent Distribution of Currently Married Women Knowing a Source for Specific Family Planning Methods by Type of Source and Method, Nepal, 1981

<u>Source</u>	<u>Method</u>					
	<u>Female Sterilization</u>	<u>Vasectomy</u>	<u>Pill</u>	<u>Condom</u>	<u>Injectable</u>	<u>IUD</u>
Health Post/ Hospital	85.7	82.0	46.4	51.6	83.5	79.8
Store	--	--	8.4	12.1	--	--
Family Planning Center	9.0	8.9	29.2	26.4	14.0	17.2
Mobile Team	4.8	7.8	5.9	4.3*	2.4*	2.5*
Other	0.5*	1.3*	4.4	3.1*	0.1*	0.5*
Home Delivery	--	--	5.8	2.5*	--	--
Total (N)	1,523	1,185	807	415	259	247

Note: *Less than 25 women.

--Not applicable.

of the women knowing sources for pills and condoms, but for all the other modern methods, which require medical attention, 80 to 90 percent of the sources given were health posts or hospitals. Family planning centers were the second most frequently named source for all methods. Commercial outlets for pills and condoms were mentioned by 8 percent and 12 percent, respectively, of women who knew sources for these methods.

Home delivery was mentioned by small percentages of women reporting a source for pills and condoms. Given the fact that these contraceptives are available through panchayat-based health workers, village health workers, and fieldworkers of various nongovernmental organizations, who even deliver pills and condoms on a door-to-door basis, these percentages may be underestimates. It is also possible that some responses giving such workers as the source may have been coded as health post/hospital or family planning center, since these workers use these facilities as their base.

It should be noted that most of the clinics and district offices of the FP/MCH Project are located in the government's health centers, health posts, and hospitals (or in their vicinity), and that the family planning service centers of the Integrated Community Health Services Delivery Project (ICHSDP) are also located in health posts and hospitals. Thus, respondents who report a family planning center as the source may be referring to either a free-standing family planning clinic or one physically located in another government health facility; in addition, no distinction can be made between the particular government projects in the responses in the NCPS.

However, it is to be noted that at the time of the survey, female sterilization was not routinely available in hospitals anywhere except Kathmandu. District family planning offices were involved in arranging for the mobile camps to be held at the district hospitals. This situation may explain why a large proportion of the respondents said that this service is available in hospitals rather than mobile camps.

A similar misinterpretation has been found in the larger proportion of women saying that pills and condoms are available in the mobile camps rather than through home delivery of these methods by fieldworkers.² Unfortunately the questionnaire did not have a specific category reserved for the response, "home delivery of the method." Interviewers may have marked the code for mobile team as the closest approximation to the actual response, or if the respondent was not precise about the means of obtaining these methods. It was only at the coding stage that the importance of "home delivery" was realized, and this category was then added to the coding system. Thus, this deficiency in the questionnaire could account for the under-reporting of home delivery.

Besides these plausible reasons for the discrepancy between the survey data and actuality, the question on type of source was asked of all the respondents who said that they had heard of the methods. Although the users may have an accurate perspective regarding the availability of specific methods, the perspective of nonusers may be completely different from reality.

Some differences between Terai women and women from the Hills or Mountains were found in the sources named for the pill, condom, vasectomy, and female sterilization. As Table 8.3 shows, for the pill and vasectomy, Terai women reported health posts and hospitals considerably more often than women from the Hills or Mountains.³ For example, 57 percent of

² Mobile camps have been established to provide sterilization services periodically in many parts of the Kingdom. Pills and condoms are not routinely provided at mobile camps. However, these methods are offered only to clients who are found to be ineligible for sterilization during preliminary screening.

³ The data by region and residence for injectables and IUD are presented in appendices because of the small cell sizes. This procedure is also followed for subsequent sections on the other availability indicators.

Table 8.3 Percent Distribution of Currently Married Women 15-49 Years of Age Who Know Family Planning Methods and Sources by Type of Source, Specific Method, and Geographic Region, Nepal, 1981

Source	Method and Region											
	Female Sterilization			Vasectomy			Pill			Condom		
	Mountain	Hill	Terai	Mountain	Hill	Terai	Mountain	Hill	Terai	Mountain	Hill	Terai
Health Post/ Hospital	84.6*	80.2	87.2	71.4*	74.4	86.0	39.4*	38.6	56.7	46.2*	50.0	54.1
Store	--	--	--	--	--	--	6.1*	8.9	8.1	15.4*	13.4	10.1*
Family Planning Center	0.0	12.9	8.1	0.0	11.4	8.0	51.5*	36.9	17.0	38.5*	28.5	22.8
Mobile Team and Other	15.4*	7.0*	4.7	28.6*	14.2	6.0	3.0*	9.6	11.9	0.0	5.2*	10.8*
Home Delivery	--	--	--	--	--	--	0.0	6.0	6.3*	0.0	2.9*	2.2*
Total (N)	16	312	1,195	26	371	788	42	421	345	16	220	179

Note: *Less than 25 women.

--Not applicable.

Terai women who knew a source for the pill mentioned health posts or hospitals, compared to 39 percent of Hill and Mountain women. Instead, these women tended to report family planning centers as the likely source. There was less than a 10 percent difference among the regional groupings reporting health posts or hospitals, however, for the condom and female sterilization. For vasectomy, mobile teams and other miscellaneous sources were more frequent in the responses of Hill women (14 percent) than Terai women (6 percent).

Urban-rural differentials were fairly consistent across all four methods, as shown in Table 8.4. Regardless of the method, urban women perceived family planning centers as sources more often than rural women. In some cases there was a two-to-three fold difference; for example, 22 percent of urban women and only 7 percent of rural women gave family planning centers as a source for male sterilization.

Commercial outlets for pills and condoms are not reported as frequently as might be expected in both urban and rural areas, especially since the Contraceptive Retail Sales Project advertises and promotes the sale of pills and condoms through general shops and drugstores. Only 16 percent of the urban respondents who know a pill source stated that it could be obtained from shops, and in rural areas only 7 percent gave stores as the source. It should be noted, however, that the CRS Project started distribution of pills and condoms on a limited scale through stores in the urban areas. It is only recently that coverage has been expanded to almost all of the urban areas, as well as a few rural areas. Thus, it might take some time before people realize that shops are also one of the major sources of supply for pills and condoms.

Mode of Transportation

In the NCPS, respondents who had knowledge of family planning and knew a source where a particular method could be obtained (including current users of that method) were further asked about the mode of transportation to reach that source. Table 8.5 provides information on

Table 8.4 Percent Distribution of Currently Married Women 15-49 Years of Age Who Know Family Planning Methods and Sources by Type of Source, Specific Method, and Type of Residence, Nepal, 1981

Source	Method and Residence							
	Female Sterilization		Vasectomy		Pill		Condom	
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
Health Post/ Hospital	75.9	87.0	73.3	83.4	51.6	45.3	45.6	53.6
Store	--	--	--	--	15.5*	7.0	20.6*	9.3
Family Planning Center	21.2	7.3	22.2	6.8	32.0	28.6	33.2	24.2
Mobile Team and Other	2.9*	5.6	4.5*	9.8	0.8*	12.2	0.4*	9.7
Home Delivery	--	--	--	--	0.2*	7.0	0.2*	3.2*
Total (N)	183	1,341	155	1,030	138	670	103	312

Note: *Less than 25 women.

--Not applicable.

Table 8.5 Percent Distribution of Currently Married Women 15-49 Years of Age Knowing a Source for Specific Family Planning Methods by Mode of Transportation to Source and Method, Nepal, 1981

<u>Transportation</u>	<u>Method</u>					
	<u>Female Sterilization</u>	<u>Vasectomy</u>	<u>Pill</u>	<u>Condom</u>	<u>Injectable</u>	<u>IUD</u>
Home Delivery	--	--	5.8	2.5*	--	--
Walk	34.6	39.8	64.2	62.8	41.9	47.0
Gas Vehicle ¹	51.1	44.0	20.5	23.7	47.7	41.6
Rickshaw	3.6	3.6	4.1	4.8*	5.2*	7.4*
Other ²	10.6	12.6	5.4	6.2	5.2*	4.0*
Total (N)	1,508	1,160	806	419	255	246

Note: *Less than 25 women.

--Not applicable.

¹The category, "gas vehicle," includes bus, truck, tractor, taxi, private car, motorcycle, and auto-rickshaw (or "trishaw").

²The category, "other," includes bicycle, animal-drawn cart, and horse.

the means of transportation for each method of contraception known. It is clear from the table that women who knew pills and condoms would walk to the source more often than women who knew a source for both temporary and permanent clinic-based methods.

Some differences in mode of transport by geographical region and method were found, as Table 8.6 shows. In general, the regional patterns of transport mode are similar for these pairs of methods: pills and condoms, and vasectomy and female sterilization. For example, about 70 percent of Hill women would walk to the pill or condom source, compared to 50 percent of Terai women knowing a source for pills or condoms. For

Table 8.6 Percent Distribution of Currently Married Women 15-49 Years of Age Knowing a Source for Specific Family Planning Methods by Mode of Transportation to Source, Method, and Geographic Region, Nepal, 1981

Transportation	Method and Region											
	Female Sterilization			Vasectomy			Pill			Condom		
	Mountain	Hill	Terai	Mountain	Hill	Terai	Mountain	Hill	Terai	Mountain	Hill	Terai
Home Delivery	--	--	--	--	--	--	0.0	5.9	6.3*	0.0	2.8*	2.3*
Walk	84.6*	66.9	26.0	76.2*	63.0	28.1	96.9	72.4	50.3	100.0*	67.6	53.3
Gas Vehicle	15.4*	29.2	57.0	23.8*	32.5	49.9	0.0	18.9	24.9	0.0	26.7	22.0
Rickshaw	0.0	0.3*	4.5	0.0	0.1*	5.3	0.0	0.8*	8.5	0.0	0.0	11.4*
Other	0.0	3.6*	12.3	0.0	4.4*	16.7	3.1*	1.9*	10.0	0.0	2.8*	11.0*
Total (N)	16	295	1,197	26	353	781	40	423	342	16	225	177

Note: *Less than 25 women.

--Not applicable.

each method shown, women from the Mountains and Hills were more likely to walk and less likely to use rickshaws and other non-motorized vehicles than Terai women. For male and female sterilization Terai women were more likely to use gas vehicles (50 and 57 percent, respectively) than Mountain and Hill women (32 percent for vasectomy and 29 percent for female sterilization for the Hill women, and even lower percentages for Mountain women).

To a great extent, these results reflect the availability and utility of various means of transportation. The Terai is fairly flat land and has relatively more roads, so gas vehicles, rickshaws, bullock carts, bicycles, and so on can be used, but in the Hills and Mountains the usual way to travel is walking along dirt trails up and down steep hills. Thus, in the NCPS, Terai women reported a greater variety of modes of transportation compared to women living in the other regions.

In addition to better transportation facilities, it is reasonable that more Terai women would use a motor vehicle to reach the source for female sterilization than Hill or Mountain respondents, as more mobile sterilization camps are held in the Terai and transportation is provided for clients.

Table 8.7 presents urban-rural differences in transportation for each specific method. Again, kinds of transportation chosen within urban and rural residence follow similar patterns for two major groupings -- the pill and condom, and the permanent methods. Regardless of method, however, rural women were more likely to walk and less likely to use rickshaw to the source than urban women. For example, two-thirds of rural women but only about half of urban women who knew a pill source would walk there. There are less differences across methods in use of gas vehicles than might be expected, given the results presented earlier by region. Only for pill and condom, and not for vasectomy and female sterilization, are urban women more likely to use motor vehicles than rural women. This trend can be seen clearly in the table, where for example, 36 percent of urban women but only 17 percent of rural women

Table 8.7 Percent Distribution of Currently Married Women 15-49 Years of Age Knowing a Source for Specific Family Planning Methods by Mode of Transportation to Source, Method, and Type of Residence, Nepal, 1981

<u>Transportation</u>	<u>Method and Residence</u>							
	<u>Female Sterilization</u>		<u>Vasectomy</u>		<u>Pill</u>		<u>Condom</u>	
	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Home Delivery	--	--	--	--	0.2*	7.0	0.2*	3.2*
Walk	30.0	35.3	28.1	41.7	46.1	68.1	43.0	69.5
Gas Vehicle	47.0	51.7	48.2	43.3	36.4	17.2	40.4	18.1
Rickshaw	21.4	1.1*	21.2	0.8*	15.3*	1.7*	14.5*	1.6*
Other	1.6*	11.9	2.4*	14.2	2.1*	6.0	1.9*	7.6*
Total (N)	185	1,323	160	1,000	140	666	105	313

Note: *Less than 25 women.

--Not applicable.

who know a source for the pill would use motor transport; for female sterilization, 47 percent of urban women and nearly the same proportion of rural women (52 percent) report using gas vehicles. Urban women also appear to be less aware of home delivery of the pill than might have been expected.

Perceived Time to Reach Source

Women who knew sources for modern methods (both nonusers and current users) were asked how much time it took to reach the place. Responses about travel time are contingent upon the perceived distance and also the mode of transport assumed by the respondent in answering the question. In Table 8.8 the perceived time to the source of specific methods is shown. It can be seen that home delivery accounts for 6 percent of women who know a source for the pill, and 2 percent for the condom. For all temporary methods, including pill and condom, between 30 and 40 percent of the women reported travel time to the source of less than 30 minutes. However, for male and female sterilization, only about 15 percent said they could reach the source within that time. Travel time for these two methods was considerably longer than for the other methods; only 22 percent of those mentioning female sterilization and 28 percent mentioning vasectomy could reach the source within an hour, compared to about 50 percent for each of the other methods. This comparison seems reasonable, as the number of places where sterilization services are available is highly limited relative to temporary methods. Coupling this result with the earlier observation that women knowing or using sterilization tended to use motorized transport, it is clear that women must travel long distances from their homes to obtain this health service. Long travel times were not uncommon for any methods, as between 10 and 20 percent of women who reported a source for any of the six methods said it took four or more hours to reach the source.

One might have expected that a larger proportion of women would be within one hour's time from a source for the pill and condom because of the increased number of panchayat-based field workers and village health

Table 8.8 Percent Distribution of Currently Married Women 15-49 Years of Age Knowing a Source for Specific Family Planning Methods by Travel Time to Source and Method, Nepal, 1981

Time	Method					
	Female Sterilization	Vasectomy	Pill	Condom	Injectable	IUD
Home Delivery	--	---	6.0	2.5*	---	---
< 30 Minutes	12.8	17.6	31.4	39.5	33.9	39.5
30-59 Minutes	9.5	10.8	12.3	12.0	13.5	15.5
1-3 Hours	58.5	52.6	30.5	30.6	41.4	36.6
4+ Hours	19.2	19.0	19.8	15.4	11.2	8.4*
Total (N) ¹	1,443	1,129	778	410	258	240

Note: *Less than 25 women.

¹One percent or less of respondents knowing a source did not know how long the travel time was. These women have been excluded from the percentages in this and the following tables on travel time.

--Not applicable.

workers, who are also working at the panchayat level. The results suggest that almost half of the women who know pill and condom are simply not aware of any source nearby.

As with mode of transportation, regional patterns of travel time, shown in Table 8.9, are similar for pills and condoms and for female sterilization and vasectomy. For pills and condoms, roughly 30 to 40 percent of women in the Hills and the Terai reported less than 30 minutes' travel time, and another 10 to 15 percent in both regions gave travel times between one-half and one hour. A higher proportion of Terai than Hill women, however, took one to three hours to reach the source. Stronger regional differences in travel time were found for the permanent methods. For example, one-fourth of women in the Hills said it took

Table 8.9 Percent Distribution of Currently Married Women 15-49 Years of Age Knowing a Source of Specific Family Planning Methods by Travel Time to Source, Method, and Geographic Region, Nepal, 1981

Time	Method and Region											
	Female Sterilization			Vasectomy			Pill			Condom		
	Mountain	Hill	Terai	Mountain	Hill	Terai	Mountain	Hill	Terai	Mountain	Hill	Terai
Home Delivery	--	--	--	--	--	--	0.0	6.2	6.5*	0.0	2.8*	2.4*
< 30 Minutes	0.0	26.5	9.2	9.5*	23.9	14.8	0.0	32.3	34.0	0.0	41.1	41.3
30-59 Minutes	0.0	9.5	9.6	4.8*	12.5	10.2	0.0	12.1	14.1	0.0	10.9	14.7
1-3 Hours	23.1*	25.0	68.2	23.8*	31.5	64.1	19.4*	26.0	37.4	23.1*	25.1	38.6
4+ Hours	76.9*	38.9	13.0	61.9*	32.1	11.0	80.6	23.5	8.0	76.9*	20.1	3.0*
Total (N)	16	307	1,119	26	365	737	39	408	332	16	225	169

Note: *Less than 25 women.

--Not applicable.

less than half an hour to reach the source, compared to only 10 to 15 percent of Terai women. Finally, women from the Mountains and Hills reported travel times of at least four hours more often than Terai women for both pairs of methods.

The extreme difficulty in obtaining family planning methods in the Mountain region is illustrated by the fact that 81 percent of the 39 respondents from that area who knew a source for the pill said that it would take four or more hours to reach the source. Similar percentages are found in Table 8.9 for the other methods; however, these figures should be viewed with some caution because of the small numbers of women who reported source knowledge in the Mountains.

Table 8.10 shows that regardless of method, there are strong urban-rural differences in travel time. Between 70 and 85 percent of urban women believed they could reach the service point within thirty minutes, compared to about 5 to 25 percent of rural women. Travel times of one hour or more were reported by 60 percent of rural women reporting a source for the pill and condom and about 80 percent for male and female sterilization. The shorter perceived travel times for urban women compared to rural women are related to an earlier finding that urban women tended to use vehicles rather than to walk. Furthermore, more service points are available in urban than rural areas, so urban respondents were also probably aware of more possible sources.

Perceived Convenience of the Source

Respondents who specified knowledge of a source of contraception were also asked whether it was convenient for them to reach the place they named. On the whole, the majority of these women felt that the source that they mentioned for a particular method was convenient. Despite the fact that service outlets for clinical methods of contraception are still very limited, over half of the respondents said that the source was convenient. Table 8.11 shows that the percentages of women who believe the source is convenient range from 53 percent for

Table 8.10 Percent Distribution of Currently Married Women 15-49 Years of Age Knowing a Source for Specific Family Planning Methods by Travel Time to Source and Type of Residence, Nepal, 1981

<u>Time</u>	<u>Method and Residence</u>							
	<u>Female Sterilization</u>		<u>Vasectomy</u>		<u>Pill</u>		<u>Condom</u>	
	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Home Delivery	--	--	--	--	0.2*	7.3	0.2*	3.3*
< 30 Minutes	71.7	4.3	75.8	8.3	81.7	20.5	86.4	23.8
30-59 Minutes	15.8	8.6	13.7*	10.3	11.1*	12.6	8.8*	13.1
1-3 Hours	12.4*	65.2	10.2*	59.4	6.9*	35.6	4.6*	39.3
4+ Hours	0.1*	22.0	0.3*	22.0	0.2*	24.0	0.0	20.5
Total (N)	181	1,261	156	973	139	640	103	307

Note: *Less than 25 women.

--Not applicable.

Table 8.11 Percent Distribution of Currently Married Women 15-49 Years of Age Knowing a Source for Specific Family Planning Methods by Perceived Convenience of Source and Method, Nepal, 1981

<u>Perceived Convenience</u>	<u>Method</u>					
	<u>Female Sterilization</u>	<u>Vasectomy</u>	<u>Pill</u> ¹	<u>Condom</u> ¹	<u>Injectable</u>	<u>IUD</u>
Convenient	52.6	52.7	64.5	73.1	74.1	79.5
Inconvenient	36.1	38.0	30.9	23.6	19.9	16.9
Don't know	11.3	9.3	4.7	3.3*	5.9*	3.5*
Total (N)	1,534	1,188	762	406	263	251

Notes: *Less than 25 women.

¹Women who mentioned home delivery were not asked this question and are therefore excluded from the base for percentages in this and the following tables on convenience.

male and female sterilization to 80 percent for the IUD. It might have been expected that these percentages would have been even lower in the Nepalese context.

Table 8.12 shows that differences between Hill and Terai women in perceived convenience of sources of family planning methods are not as strong as those observed for travel time and mode of transport. However, it should be pointed out that four out of five women living in the Mountains who gave a source felt that sources for pill, condom, and female sterilization were inconvenient, and two-thirds reporting a vasectomy source also said it was inconvenient. Those Hill and Terai women responding to this question tended to say sources were convenient. As before, the small numbers of Mountain women responding to this question necessitate a cautious interpretation, but these results are quite consistent with the small number of family planning centers and the lack of transportation in this region.

Table 8.12 Percent Distribution of Currently Married Women 15-49 Years of Age Knowing a Source for Specific Family Planning Methods by Perceived Convenience of Source, Method, and Geographic Region, Nepal, 1981

Perceived Convenience	Method and Region											
	Female Sterilization			Vasectomy			Pill			Condom		
	Mountain	Hill	Terai	Mountain	Hill	Terai	Mountain	Hill	Terai	Mountain	Hill	Terai
Convenient	7.1*	54.1	52.8	23.8*	57.9	52.2	15.2*	64.9	70.3	15.4*	73.8	77.6
Inconvenient	85.7*	44.7	33.2	66.7*	38.8	36.7	78.8	32.6	22.6	84.6*	24.9	16.2
Don't Know	7.1*	1.2*	14.0	9.5*	3.3*	12.0	6.1*	2.5*	7.1*	0.0	1.3*	6.2*
Total (N)	18	312	1,205	26	373	789	42	397	323	16	219	171

Note: *Less than 25 women.

In Table 8.13 it can be seen that over 90 percent of urban women said sources were convenient for each method, but rural women gave this response rather less often. In addition, there was more variation in the level that said a source was convenient for the various methods among rural than urban women. About 60 percent of the rural respondents said the source for the pill was convenient, and 66 percent of rural women felt the source for the condom was convenient; however, for male and female sterilization, only 47 percent felt the source was sufficiently easy to reach.

Comparisons between Users and Nonusers of Modern Contraception

In this section, comparisons between users and nonusers on some of the measures suggest that perceived availability is lower for nonusers than users. It is important to recognize an analytical problem in these comparisons. The observed perceived availability of family planning really contains two elements -- the objective fact and a subjective element. For example, a woman might be three days' walk from the nearest service point. The long distance may make it impossible for her to obtain family planning services. In this case, her response of three days is accurate. On the other hand, her response could also contain some subjective bias -- due to an unfavorable attitude towards family planning, or lack of familiarity with the kind of transportation and travel time actually necessary. Thus, she might answer that the travel time is longer than it, in fact, is. Both possible perspectives are pointed out as the results comparing users and nonusers are presented below.

The small numbers of current users in the Nepal CPS preclude reliable analysis at a high level of detail; however, some results of possible practical significance have been obtained in a more general level of analysis. These are presented in Tables 8.14 to 8.17 and discussed below. As in the previous sections, only women who knew methods and sources are included in the analysis.

Table 8.13 Percent Distribution of Currently Married Women 15-49 Years of Age
Knowing a Source for Specific Family Planning Methods by Perceived
Convenience of Source, Method, and Type of Residence, Nepal, 1981

<u>Perceived Convenience</u>	<u>Method and Residence</u>							
	<u>Female Sterilization</u>		<u>Vasectomy</u>		<u>Pill</u>		<u>Condom</u>	
	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Convenient	90.6	47.3	92.0	46.6	90.1	58.7	92.8	66.3
Inconvenient	6.2*	40.2	5.4*	43.1	5.2*	36.6	3.9*	30.4
Don't know	3.2*	12.4	2.6*	10.3	4.7*	4.7	3.3*	3.3*
Total (N)	186	1,348	159	1,029	140	622	104	302

Note: *Less than 25 women.

Table 8.14 shows that nonusers believed all methods could be obtained from health posts or hospitals more often than users of those methods. Instead users tend to report family planning centers as the source of their methods.

For example, about half of the women who know a source for the pill mentioned a health post or hospital, whereas half of pill users stated family planning centers. This finding is probably a reflection of the users' familiarity with the facility visited. From a programmatic viewpoint, the nonusers' somewhat inaccurate belief is probably not serious at this time, as most of the family planning centers are located in or close to health posts and district hospitals, so a client can easily be directed to the proper location.

One-fourth of women protected by male sterilization cited mobile teams as the source, compared to only about 5 percent of nonusers. (The figures of 32 percent for vasectomy users and 5.3 percent for nonusers in Table 8.14 include both mobile teams and other sources.) To the extent that these results are due to lack of information about available sources (the subjective element noted above), IE&C activities might focus on improving the public's awareness of mobile teams for family planning services and how to locate a team that could perform the operation. However, the lower reporting of mobile teams by nonusers is likely to be due partially to the lack of mobile camps in areas where the nonusers live.

There is little variation between users and nonusers in the method of transportation chosen to reach a source, as shown in Table 8.15. Users seem to report gas vehicles for both male and female sterilization more often than nonusers who know a source. As was pointed out earlier, this pattern may reflect the fact that the family planning program transports clients choosing these methods in motorized vehicles.

Table 8.16 presents the results on travel time for users and nonusers of specific methods. Except for the pill, users tend to report travel

Table 8.14 Percent Distribution of Currently Married Women 15-49 Years Old Who Know a Source for Family Planning Methods by Type of Source, Specific Method, and Contraceptive Use Status, Nepal, 1981

Source	Method and Use Status							
	Female Sterilization		Vasectomy		Pill		Condom	
	User	Nonuser	User	Nonuser	User	Nonuser	User	Nonuser
Health Post/ Hospital	70.7	87.2	57.8	86.0	12.6*	49.2	34.5*	52.7
Store	--	--	--	--	11.1*	8.2	20.6*	11.6
Family Planning Center	20.6	7.9	10.2*	8.6	53.7	27.1	28.6*	26.3
Mobile Team, Other	8.8*	5.0	32.0	5.3	16.5*	9.8	16.3	6.9
Home Delivery	--	--	--	--	6.1*	5.8	0.0	2.6*
Total (N)	136	1,388	166	1,019	62	745	23	392

Notes: *Less than 25 women.

--Not applicable.

The number of users may differ from those shown in other tables because of non-response.

Table 8.15 Percent Distribution of Currently Married Women 15-49 Years Old Who Know a Source for Family Planning Methods by Mode of Transportation to Source, Method, and Contraceptive Use Status, Nepal, 1981

<u>Transportation</u>	<u>Method and Use Status</u>							
	<u>Female Sterilization</u>		<u>Vasectomy</u>		<u>Pill</u>		<u>Condom</u>	
	<u>User</u>	<u>Nonuser</u>	<u>User</u>	<u>Nonuser</u>	<u>User</u>	<u>Nonuser</u>	<u>User</u>	<u>Nonuser</u>
Home Delivery	--	---	--	--	6.1*	5.8	0.0	2.6*
Walk	19.2	36.2	39.2	39.9	71.4	63.6	62.5*	62.8
Gas Vehicle	61.8	50.0	52.9	42.6	15.2*	21.0	17.5*	24.0
Rickshaw	5.0*	3.5	3.3*	3.6	2.8*	4.2	2.9*	5.0*
Other	13.9*	10.3	4.7*	13.9	4.5*	5.4	17.1*	5.6*
Total (N)	138	1,371	160	1,000	62	744	23	395

Note: *Less than 25 women.

--Not applicable.

Table 8.16 Percent Distribution of Currently Married Women 15-49 Years Old
Who Know a Source for Family Planning Methods by Travel Time to
Source, Method, and Contraceptive Use Status, Nepal, 1981

<u>Time to Source</u>	<u>Method and Use Status</u>							
	<u>Female Sterilization</u>		<u>Vasectomy</u>		<u>Pill</u>		<u>Condom</u>	
	<u>User</u>	<u>Nonuser</u>	<u>User</u>	<u>Nonuser</u>	<u>User</u>	<u>Nonuser</u>	<u>User</u>	<u>Nonuser</u>
Home Delivery	--	--	--	--	6.0*	6.0	0.0	2.7*
< 30 Minutes	18.6	12.2	32.2	15.2	38.8*	30.7	42.1*	39.4
30-59 Minutes	11.4*	9.3	17.3	9.7	8.9*	12.6	21.4*	11.5
1-3 Hours	54.2	59.0	39.2	54.8	18.2*	31.6	19.3*	31.2
4+ Hours	15.8*	19.6	11.3*	20.3	28.0*	19.1	17.2*	15.2
Total (N)	135	1,308	160	969	63	715	22	389

Note: *Less than 25 women.

--Not applicable.

times over an hour less frequently than nonusers. Perceptions of very long travel times on the part of nonusers may discourage them from obtaining a modern family planning method. On the other hand, the longer travel times reported by nonusers may accurately reflect the fact that they live farther away from sources than users. The 25 percent difference between users and nonusers of vasectomy who report travel times of one hour or more may be related to the finding mentioned above about mode of transport to the source.

Finally, the data in Table 8.17 suggest that nonusers may perceive sources of sterilization to be less convenient than women who have the actual experience to evaluate. No difference was found between users and nonusers of the pill, and there are too few condom users to analyze. As this question requires a subjective assessment by the respondent on varying levels of factual and experiential information, it is difficult to interpret these results.

Summary

For the most part, the results on perceived availability presented in this chapter reflect the actual availability of family planning services in Nepal. Only about one-third of all respondents could name a source for a contraceptive method. Even when source knowledge only among women who know any modern method is considered, fully a third of this group are not aware of a place to obtain a method.

The general agreement between perceived and actual availability is also seen in the regional and residential differences. Compared to the Terai and urban areas, actual availability is limited in the Mountains and Hills and rural areas due to the rugged terrain, sparse health and family planning facilities, and the few kinds of transportation that can be used. Responses given by women interviewed in the NCPS about travel time and means of transportation, in particular, confirm this picture of availability.

Table 8.17 Percent Distribution of Currently Married Women 15-49 Years Old Who Know a Source for Family Planning Methods by Perceived Convenience of Source, Method, and Contraceptive Use Status, Nepal, 1981

<u>Perceived Convenience</u>	<u>Method and Use Status</u>							
	<u>Female Sterilization</u>		<u>Vasectomy</u>		<u>Pill</u>		<u>Condom</u>	
	<u>User</u>	<u>Nonuser</u>	<u>User</u>	<u>Nonuser</u>	<u>User</u>	<u>Nonuser</u>	<u>User</u>	<u>Nonuser</u>
Convenient	68.9	51.1	74.1	49.3	66.5	64.3	85.4*	72.4
Inconvenient	25.6	37.2	18.7	41.1	31.0*	30.9	12.5*	24.3
Don't know	5.5*	11.9	7.3*	9.6	2.5*	4.8	2.1	3.4*
Total (N)	138	1,396	163	1,025	59	703	22	384

Note: *Less than 25 women.

Comparisons between users and nonusers who know sources provide other insights into perceived availability. Nonusers reported longer travel times and greater inconvenience of sources, compared to current users. Naturally, in the early stages of a family planning program, the first users are likely to be relatively close to sources. There is no reason to doubt that the responses of nonusers in the NCPS indicate the difficulty they would have to obtain a method.

Contrasts in perceived availability of specific family planning methods also have some basis in the actual situation. Sources for male and female sterilization could not be reached as easily as pill and condom sources; longer travel times and the need to use vehicles were noted. In addition, women's subjective assessments of convenience were lower for the permanent methods, which are almost exclusively clinic-based. The requirements of skilled medical staff and suitable facilities limit the availability of vasectomy and, even more so, female sterilization. As this chapter has pointed out, the family planning program has nevertheless tried to improve availability of these methods by using mobile teams, for example, and extending the program's range of contact with eligible couples living in remote areas through auxiliary health workers.

CHAPTER 9

DISCUSSION AND RECOMMENDATIONS

The data of the Nepal Contraceptive Prevalence Survey are an important resource for planning and evaluating the family planning programs of Nepal. This chapter discusses concerns about survey methodology, which ought to be considered in using the NCPS data, and presents general conclusions and recommendations about family planning efforts in Nepal.

The Impact of Survey Methodology on NCPS Results

Besides the logistical difficulties in carrying out a national survey in Nepal, and the errors normally expected during fieldwork and data processing, sample surveys in Nepal have been criticized for not being able to obtain valid and reliable information (Campbell, Shrestha, and Stone 1979). Problems in respondents' comprehension of question wording, their willingness to respond in the context of a single survey interview session, and differences in the conceptual frameworks of respondents and the questionnaire introduce a further degree of error. Unfortunately, it is difficult to quantify this additional error (sometimes referred to as nonsampling error) and identify its effects precisely on specific questions in the interview. The main criticisms of other investigators are briefly discussed below with some comments on how these problems were taken into account in different phases of the NCPS.

First, the survey approach assumes that respondents understand the words and meaning of the questions that are asked in the interview. In several social science surveys in Nepal, Campbell, Shrestha, and Stone found that the words chosen for the questions were sometimes inappropriate, compared to the daily language spoken by most of the respondents. Complex language structure also interfered with comprehension of what was being asked. Questions about attitude, opinions, and hypothetical situations can be misunderstood. During the NCPS questionnaire design

stage, elaborate discussions were held among the survey's research staff to make the questions as simple as possible. In addition, a seminar with social scientists, linguists, and anthropologists was held after the pretest to focus further on language simplification. The questionnaire was available in three widely spoken languages -- Nepali, Bhojpuri, and Maithali. Instead of hiring interviewers only in Kathmandu, they were recruited in various districts throughout the Kingdom in order to have interviewers familiar with local dialects and language usage.

Second, the survey method of obtaining information assumes that respondents can give a direct response, which is relevant to the question asked, without withholding information. It has been observed by other investigators in Nepal that expressing the truth about sensitive, intimate topics, such as fertility behavior and family planning, is in fact difficult for many Nepalese women. This problem is compounded when male interviewers are used to collect such information from female respondents. During the recruitment of interviewers for the NCPS, female interviewers were sought wherever possible. Even with this emphasis, only 14 of the 55 interviewers recruited were female.

Third, there is an inherent weakness in the survey method of data collection in obtaining a true picture of the social reality that the survey is trying to measure. Moreover, the weakness may be exaggerated in some cultures. In Nepal, the survey interview situation is not a natural or common form of communication. This particular problem of survey research is not easily solved. Nevertheless, during the training program, interviewers were clearly instructed on the nature of the data being collected and precautionary measures to be taken to enhance the quality of the data. During fieldwork, supervisors made spot checks and surprise visits to interviews in order to improve interviewing techniques.

Thus, it is important to consider the potential effects of these problems on the data presented in this report. Responses will be closer to the truth for some questions than others. Although a single numerical value is presented for a certain type of response, in reality there is

likely to be a range above and below that specific value. This range could be small for some questions and large for others, depending on the particular mixture of effects produced by the kinds of problems noted. In addition, it should be kept in mind that despite the fact that a pattern may appear in the data, the problems inherent in the methodology may distort reality when it is measured in a survey.

Throughout this report, guarded interpretation has been given to some results due to these kinds of problems. For example, the responses about male methods of contraception (particularly condoms) may be subject to the second and third problems mentioned above. Another problem area involved questions about intentions to use family planning in the future and desire for and timing of future births. It may have been difficult for respondents to understand the hypothetical framework of these questions. Additional language problems also made it impossible to classify a large proportion of respondents by ethnicity and may have contributed to the inconsistencies in responses on perceived availability, noted in Chapter 8.

Nevertheless, the NCPS is a rich source of information about the current situation with regard to family planning. Progress is evident in spreading awareness of family planning methods, but some of the underlying social forces, attitudes, and individual behavior associated with contraceptive use are strong enough to result in adoption of contraception by only limited groups of women. The recommendations below are based directly on the survey results and focus on changing these underlying socio-demographic factors as well as on family planning program activities.

Recommendations

- Although there has been marked improvement in levels of knowledge of family planning since 1976, the wide differentials between urban and rural women, literate and illiterate women, and Terai and Hill women lead to two recommendations. First, the FP/MCH program should continue to be expanded, and fieldworkers

should be made more effective in rural Nepal. Second, local leaders and social workers should be encouraged to actively participate in family planning activities. The decentralization program conducted by the FP/MCH program appears to be a step in this direction.

- The NCPS found the highest levels of knowledge and use of contraception among women in the Terai. The region also has relatively good communications and transportation facilities. These factors justify a continuation of the current policy of expanding family planning services in Terai districts.
- Although there seems to have been some reduction in fertility since 1976, the continuing high level of fertility demands more rigorous and effective efforts in family planning activities.
- In the survey 40 percent of the respondents indicated they did not want to have more children. The family planning program should reach these women with sterilization services. Both the static sterilization facilities and the number of mobile camps should be increased in order to provide this method to women who want to terminate childbearing.
- Survey results clearly show a pronounced preference for sons among Nepalese women. According to the data, women desire two sons on the average. If this trend continues, at some point it could become difficult to recruit sterilization acceptors, assuming most of the women who have achieved their desired number of sons would be sterilized. This son preference also implies a lower bound of four on the TFR. Thus, from the program point of view, a rigorous campaign to reduce the desired number of sons among Nepalese women should be planned and implemented, so that the desired family size per couple also decreases.

- Analysis of the desired time for the next child indicates that the concept of spacing births is not very popular in Nepal. In addition, the analysis shows that women use family planning only when the desired number of children is attained. IE&C activities should be specially geared towards developing the concept of spacing. This approach would promote the use of temporary contraceptive methods by younger women with fewer children. With better spacing, child survivorship may also improve, as fewer children lead to longer breastfeeding and better child care.
- Analysis of ever users by their reasons for not currently using any method shows that a large proportion of these women do not want to use family planning for health reasons. The follow-up program of acceptors should be made more effective. In addition, to avoid discontinuation the pharmaceutical formulation of pills distributed should be carefully chosen to minimize the occurrence of side effects among Nepalese women.
- In view of the relatively large numbers of fieldworkers, PBHWs, and village health workers who deliver the pill and condom to people's homes, it is ironic that only 3.9 and 2.2 percent of women are aware of these services. (This result may be affected by the use of male interviewers with female respondents.) The services of fieldworkers should be made more effective through extensive training, supervision, and management.
- The data show that women working outside the home use family planning less often than those not working. This result may suggest that family planning field personnel could not reach more working women because the working hours of fieldworkers and working women overlap. Attempts should be made to assign different working hours to family planning field personnel in order to reach these women.

APPENDICES

APPENDIX 1

Population, Population Density, and Inter-censal
Rate of the Districts from the 1971 Census and Preliminary
Figures from the 1981 Census, Nepal

District (1)	Area in ¹ Sq. Kms. (2)	1971 ² Population (3)	1981 ³ Population (4)	1971 Population Density (5)	1981 Population Density (6)	Inter-censal Population Growth Rate (7)
Ilam	1,534.94	139,538	177,442	90.91	115.60	2.43
Jhapa	1,442.21	247,698	480,056	171.75	332.86	6.84
Panchthar	1,206.73	145,809	153,342	120.83	127.07	0.51
Taplejung	3,026.78	84,715	116,884	27.99	38.62	3.27
Bhojpur	2,002.38	194,506	192,789	97.14	96.28	-0.09
Dhankuta	898.42	107,649	128,568	119.82	143.10	1.79
Morang	1,962.60	301,557	534,490	153.65	272.34	5.89
Sankhuwasabha	3,205.80	114,313	129,513	35.66	40.40	1.26
Sunsari	1,186.84	223,434	343,007	188.26	289.01	4.38
Terhathum	881.84	119,307	93,305	135.29	105.81	-2.43
Khotang	1,117.22	163,297	212,108	146.16	189.85	2.65
Okhaldhunga	1,100.65	122,862	137,920	111.63	125.31	1.16
Saptari	1,385.75	312,565	381,277	225.56	275.14	2.01
Siraha	1,054.24	302,304	376,390	286.75	357.02	2.22
Solukhumbha	3,756.12	105,324	87,444	28.04	23.28	-1.84
Udaypur	2,231.13	112,622	159,313	50.48	71.40	3.53
Dhanusa	1,137.11	330,601	432,511	290.74	380.36	2.72
Dolakha	1,999.06	130,022	150,494	65.04	75.28	1.47
Mahottari	1,183.53	324,831	363,975	274.46	307.53	1.14
Ramechhap	1,604.56	157,349	163,470	98.06	101.88	0.38
Sarlahi	891.79	175,543	398,397	196.84	446.74	8.54
Sindhuli	2,333.90	147,409	188,232	63.16	80.65	2.47
Bhaktapur	132.61	110,157	160,686	830.68	1,211.72	3.85
Dhading	3,139.49	236,276	243,042	75.26	77.41	0.28
Kathmandu	547.01	353,756	422,670	646.71	772.69	1.80
Kavre	1,458.69	245,165	307,604	168.07	210.88	2.29
Lalitpur	394.51	154,998	183,464	392.89	465.04	1.70
Nuwakot	1,206.73	172,718	203,134	143.12	168.33	1.64
Rasuwa	1,239.88	17,517	29,765	14.13	24.01	5.44
Sindhupalchowk	2,559.33	206,384	232,804	80.64	90.96	1.21
Bara	1,259.78	233,401	318,010	185.27	252.43	3.14

District (1)	Area in ¹ Sq. Kms. (2)	1971 ² Population (3)	1981 ³ Population (4)	1971 Population Density (5)	1981 Population Density (6)	Inter-censal Population Growth Rate (7)
Chitwan	2,502.97	183,644	257,332	73.37	102.81	3.43
Makawanpur	2,247.71	163,766	241,984	72.86	107.66	3.98
Parsa	1,266.41	202,123	283,809	159.60	224.11	3.45
Rautahat	1,094.01	320,093	334,524	292.59	305.78	0.44
Gorkha	2,583.86	178,265	232,091	68.99	89.82	2.67
Kaski	1,289.61	151,749	223,486	117.67	173.30	3.95
Lamjung	2,148.25	140,226	154,318	65.27	71.83	0.96
Manang	2,055.42	7,436	6,210	3.62	3.02	-1.79
Syangja	1,292.93	268,606	271,001	207.75	209.60	0.09
Tanahun	1,498.43	158,139	224,508	105.54	149.83	3.57
Arghakhanchi	1,375.81	130,212	158,244	94.64	115.02	1.97
Gulmi	1,256.46	227,746	238,234	181.26	189.61	0.45
Kapilvastu	1,548.20	205,216	270,474	132.55	174.70	2.80
Nawalparasi	1,243.20	146,548	309,692	117.88	249.11	7.77
Palpa	2,360.42	212,633	215,924	90.08	91.48	0.15
Rupandehi	1,186.84	243,346	379,031	205.04	319.36	4.53
Baglung	2,227.81	172,729	216,212	77.53	97.05	2.27
Mustang	3,421.29	26,944	12,399	7.88	3.62	-7.47
Myagdi	1,541.57	57,946	95,696	37.59	62.08	5.14
Parbat	1,253.15	118,689	128,034	94.71	102.17	0.76
Dang	2,995.26	167,820	266,247	56.03	88.89	4.72
Piuthan	1,392.38	137,338	157,863	98.64	113.38	1.40
Rolpa	1,704.01	162,955	169,379	95.63	99.40	0.39
Rukum	1,836.62	96,243	132,267	52.40	72.02	3.23
Sallyan	1,876.40	141,457	151,569	75.39	80.78	0.69
Dolpa	8,221.70	19,110	21,845	2.32	2.66	1.35
Humla	5,980.62	29,524	21,283	4.94	3.56	-3.22
Jumla	2,824.55	122,753	67,545	43.46	23.91	-5.80
Kalikot	1,465.32	10,017	87,542	6.84	59.74	24.21
Mugu	3,139.49	25,718	40,658	8.19	12.95	4.69
Banke	1,879.72	125,709	205,824	66.88	109.50	5.05
Bardiya	1,558.14	101,793	200,214	65.33	128.50	7.00
Dailekh	1,637.71	156,072	168,290	95.30	102.76	0.76
Jajarkot	2,244.39	86,564	97,117	38.57	43.27	1.16

District (1)	Area in ¹ Sq. Kms. (2)	1971 ² Population (3)	1981 ³ Population (4)	1971 Population Density (5)	1981 Population Density (6)	Inter-censal Population Growth Rate (7)
Surkhet	3,209.11	104,933	165,666	32.70	51.62	4.67
Achham	1,319.45	132,212	184,239	100.20	139.63	3.37
Bajhang	3,785.96	108,623	122,129	28.69	32.26	1.18
Bajura	1,611.19	61,342	74,061	38.07	45.97	1.90
Doti	2,904.11	166,070	151,376	57.18	52.12	-0.92
Kailali	2,867.65	128,877	258,259	44.94	90.06	7.20
Baitadi	1,783.58	128,696	177,850	72.16	99.72	3.29
Dadeldhura	1,554.83	94,743	87,416	60.93	56.22	-0.80
Darchula	1,829.99	68,868	90,497	37.63	49.45	2.77
Kanchanpur	75.00	68,863	166,006	918.17	2,213.41	9.20

Nepal	144,173.16	11,555,983	15,020,451	80.15	104.18	2.66

¹ Areas are based on 1971 Census Report, Vol. I (computer output version), Central Bureau of Statistics, Thapathali, Kathmandu, 1973.

² Ibid

³ Preliminary results from 1981 census (mimeographed), circulated by National Commission on Population, Kathmandu, 1982.

APPENDIX 2

NCPS PROJECT STAFF

CENTRAL STAFF

Dr. Badri Raj Pande	National Director
Mr. Jayanti Man Tuladhar*	Project Director
Mr. Muniswor Mool	Senior Supervisor
Mr. Tek B. Dangi	Senior Supervisor
Mr. Gokarna Regmi**	Senior Superivsor
Mr. Vinaya Dhakhwa	Senior Superivsor
Mr. Bhakta B. Gubaju***	Senior Supervisor

*Involved up to data processing only.

**Worked as project director during report-writing stage.

***Involved up to the training of interviewers.

FIELD STAFF

Mr. Madan K. Sharma	Senior Supervisor and Field Supervisor
Mr. Mahadev Saha	Supervisor
Mr. Bhimlail Sharma	Supervisor
Mr. Narayan Dev Pant	Supervisor
Mr. Ganga R. Manandhar	Supervisor
Mr. Pradip Manandhar	Supervisor
Mr. Ayudha P. Yadav	Supervisor
Mr. Ghan Shyam Lal Das	Supervisor
Mr. Janak Lal	Supervisor
Mr. Lokendra Ghimere	Supervisor
Mr. Ram Narayan Pande	Supervisor

INTERVIEWERS

<u>Name of Interviewer and Sex</u>	<u>Place of Recruitment</u>
Rishi Ram Dakal (M)	Gorkha
Dev Raj Thapa (M)	Gorkha
Sundar Babu Pahadi (M)	Gorkha
Muslim Khan (M)	Rupandehi
Miss Asha Gurung (F)	Rupandehi
Miss Punam Subba (F)	Rupandehi
Ramesh Prasad Barai (M)	Rupandehi
Mrs. Bisnu Kumari (F)	Rupandehi
Om Bahadur Saha (M)	Dailekha
Indra Bahadur Thapa (M)	Dailekha
Puspa Prasad Regmi (M)	Dailekha
Birad Lal Shiku (M)	Dhulikhel

Name of InterviewerPlace of Recruitment

Miss Krisna Kamal Nakarmi (F)	Dhulikhel
Miss Sharswotee Karmacharya (F)	Dhulikhel
Ram Gopal Pradhan (M)	Dhulikhel
Buddhi Bahadur Tamang (M)	Dhulikhel
Ram Chandra Pandey (M)	Dang
Ghendra Basnet (M)	Dang
Hom Raj G.C. (M)	Dang
Kul Raj Rawat (M)	Dang
Mukunda Raj Devkota (M)	Dang
Naresh Kumar Chapagai (M)	Dharan
Dhan Kumar Rai (M)	Dharan
Koushila Rai (F)	Dharan
Shila Shrestha (F)	Dharan
Parbat Mani Rai (M)	Dharan
Mrs. Tara Karki (F)	Janakpur
Janardan P. Bhattarai (M)	Janakpur
Miss Chumu Bhattarai (F)	Janakpur
Manoj Kumar Burma (M)	Janakpur
Mrs. Nagina Devi Karna (F)	Janakpur
Baidha Nath Kalwar (M)	Pathlaiya
Udhab Kuwar (M)	Pathlaiya
Nir Kumar Mulmi (M)	Pathlaiya
Prasad Malla (M)	Pathlaiya
Miss Laxmi Lama (F)	Pathlaiya
Krisna Prasad Khatri (M)	Kanchanpur
Kamal Shingh Pali (M)	Kanchanpur
Dikar Dev Bhatta (M)	Kanchanpur
Ratan Shingh Bista (M)	Kanchanpur
Bijaya Kumar Singh (M)	Kanchanpur
Hari Singh Gurung (M)	Okhaldhunga
Eka Raj Gurung (M)	Okhaldhunga
Akal Bahadur Chale (M)	Okhaldhunga
Chitra Bahadur Gurung (M)	Okhaldhunga
Bhim Narayan Shrestha (M)	Okhaldhunga
Bidhya Laxmi Thapa (F)	Birathnagar
Yadunath Pokharel (M)	Birathnagar
Sita Ram Pokharel (M)	Birathnagar
Babali Raya (F)	Birathnagar
Gobinda Prasad Ghimire (M)	Pokhara
Gobinda Prasad Baral (M)	Pokhara
Din Bandhu Poudel (M)	Pokhara
Badri Raj Ghimire (M)	Pokhara
Bimala Thapa (F)	Pokhara

SUPPORT STAFF

Mr. Govinda Misra	Fiscal Officer (Part-time)
Mr. Ramesh Shrestha	Fiscal Officer (Part-time)
Mr. Keshav Kuwar	Fiscal Officer (Part-time)
Mr. Bhim B. Khadaka	Acting Fiscal Officer (Part-time)
Miss Rachna Tuladhar	Administrative Assistant (Full-time)
Mr. Rada Krishna Manandhar	Administrative Assistant (Full-time)
Mrs. Indira Uprety	Administrative Assistant (Full-time)
Mr. Bhagbat Pande	Administrative Assistant (Full-time)

Many other FP/MCH Project staff also directly or indirectly helped with the NCPS.

APPENDIX 3

Details of the Rural Sample¹ Nepal Contraceptive Prevalence Survey, 1981

Serial Number	Selected District	Probability of Selecting a District	Selected Panchayat	Probability of Selecting a Panchayat	Selected Ward Numbers	Probability of Selecting a Ward
1	2	3	4	5	6	7
1	Solukhumbu	.31194	Baku	.08448	1 3	.31579 .21053
			Kelung	.07156	8 4 9	.25000 .12500
					}	
2	Okhaldhunga	.34066	Jyamire	.03785	6 7 5	.33330 .33330
			Rumjatar	.07899	2 4	.29630 .22222
					}	
3	Khotang	.46320	Diplung	.03352	1 4	.25000 .12500
			Sapteshwor	.04790	1 8	.24000 .16000
					}	
4	Terhathum	.31001	Marga Pokhari	.10479	8 5	.27273 .27273
			Sungnam	.08079	2 5	.25000 .25000
					}	
5	Siraha	.94255	Bidya Nagar	.03502	6 8	.21429 .21429
			Mataiya	.03075	1 4	.40000 .24000
					}	
6	Sunsary	.56763	Bhokraha	.07389	6 7	.28571 .14286
			Madhesa	.04142	3 1	.25000 .25000
					}	
7	Morang	.81338	Dangihat	.09564	1 8	.21429 .14285
			Rangeli	.09564	3 7	.26667 .20000
					}	
8	Jhapa	.66714	Garamani	.05853	9 5	.75471 .11321
			Sharanamati	.05766	9 1	.70588 .19608
					}	

Serial Number	Selected District	Probability of Selecting a District	Selected Panchayat	Probability of Selecting a Panchayat	Selected Ward Numbers	Probability of Selecting a Ward	
1	2	3	4	5	6	7	
9	Sindhu Palchowk	.60847	Badigaon	.03992	7	.33333	
					2	.25000	
			Lamu Sangu	.03762	5	.36364	
					6	.18182	
10	Kabhre	.68507	Ganesh Than	.02723	9	.23529	
					8	.23529	
			Sanga	.04165	9	.30769	
					7	.15385	
11	Nuwakot	.78690	Kabilash	.05417	7	.34783	
					1	.26087	
			Thaprek	.06273	6	.33333	
					7	.25000	
12	Kathmandu	.96909	Basundhara	.04608	5	.30000	
					8	.20000	
			Manmaiju	.06023	9	.46154	
					6	.23077	
13	Lalitpur	.40626	Gamdhi	.03771	6	.50000	
					4	}	.25000
					2		
			Thaiba	.06847	1	.25000	
				2	.25000		
14	Mahottary	.91728	Bhangaha	.05916	8	.29787	
					1	.17021	
			Paraul	.03993	8	.25000	
					5	.25000	
15	Dhanusha	.95911	Debdiyah	.02027	1	.20000	
					5	.20000	
			Parsauni	.02066	7	.34783	
					5	.26087	
16	Sarlahi	.48116	Shibnagar	.03729	4	.27586	
					9	.13793	
			Haripurwa	.04718	8	.21622	
					1	.10811	
17	Rautahat	.97334	Ajgaibi	.03239	1	.46667	
					7	.20000	
			Keshariya Sakhuawa	.03871	9	.32259	
					6	.19355	

Serial Number 1	Selected District 2	Probability of Selecting a District 3	Selected Panchayat 4	Probability of Selecting a Panchayat 5	Selected Ward Numbers 6	Probability of Selecting a Ward 7
18	Parsa	.57872	Belaba	.05833	5 7	.41667 .16667
			Parsauni	.04974	5 2	.27273 .18182
19	Kaski	.46969	Hemja	.05556	7 3	.24000 .16000
			Shishuwa	.07778	6 1	.28571 .22857
20	Parbat	.35020	Bhuk Deurali	.04510	4 5	.46154 .15385
			Pangrang	.03704	9 5	.18182 .18182
21	Syanja	.78647	Chhitre Bhanjyang	.03730	6 1	.30000 .20000
			Rapakot	.03712	4 8	.24000 .16000
22	Dhading	.71403	Gajure	.05357	1 8	.50000 .21429
			Sallyankot	.05699	2 1	.26316 .21053
23	Tanahun	.46983	Chimkeshwari	.03360	9 5	.33333 .22222
			Purkot	.08706	4 2	.22727 .18182
24	Palpa	.56846	Galda	.02970	4 7	.33333 .16667
			Siluwa	.04872	4 5	.45455 .18182
25	Rupandehi	.68757	Chiliya	.04633	1 6	.28571 .21429
			Parsa	.04683	2 9	.35714 .21429
26	Nawalparasi	.39329	Kolhua	.04682	3 4	.32000 .24000
			Siswar	.06352	4 6	.48485 .24242

Serial Number 1	Selected District 2	Probability of Selecting a District 3	Selected Panchayat. 4	Probability of Selecting a Panchayat 5	Selected Ward Numbers 6	Probability of Selecting a Ward 7
27	Bajhang	.26100	Daulichaur	.06761	2 4	.35294 .23529
			Malali	.05007	4 3	.50000 .33333
28	Doti	.48904	Kedareswor	.03736	4 3	.33333 .16667
			Tikhatar	.06151	6 3	.20000 .20000
29	Dailekh	.45030	Jambukandh	.08522	4 2	.25806 .19355
			Sigaudi	.04799	8 3	.33333 .22222
30	Rukum	.27433	Chaur Jahari	.08240	4 7	.25000 .16667
			Muru Peugha	.06020	4 6	.21053 .21053
31	Piuthan	.38370	Balbas	.09335	8 5	.23077 .15385
			Liwang	.04446	1 5 2	.33333 .33333
32	Dang	.47458	Hapur	.09101	9 4	.26358 .15790
			Sonepur	.04838	4 6	.20000 .20000
33	Kanchanpur	.16994	Arjuni	.13504	2 9	.26667 .26667
			Dodhara	.16687	8 5	.35556 .22222

¹Overall sampling fraction for rural areas was 1/555. In each selected ward the probability of selecting a household was calculated so that each rural household had the same probability of selection.

APPENDIX 4

Details of the Urban Sample¹ Nepal Contraceptive Prevalence Survey, 1981

Number	Selected District	Probability of Selecting a District	Selected Town Panchayat	Probability of Selecting an Urban Area	Selected Ward Numbers	Probability of Selecting a Ward
1	2	3	4	5	6	7
1	Dhanusha	.95911	Janakpur	1.0	4 11 5	.31579 .24812 .13534
2	Parsa	.57872	Birgunj	1.0	17 9 10	.26163 .15698 .10465
3	Dang	.47458	Tribhuvan Nagar	1.0	8 4 2	.38182 .32727 .21818
4	Kanchanpur	.16994	Mahendra Nagar	1.0	10 18 9	.38860 .20207 .13990
5	Lalitpur	.40626	Lalitpur	1.0	9 22 15	.20257 .15434 .09646
6	Kathmandu	.96909	Kathmandu	1.0	7 30 24	.14476 .08932 .06160
7	Rupandehi	.68757	Siddhartha Nagar	1.0	5 8 6	.35156 .25781 .14063
			Butwal	1.0	8 6 5	1.05882 ² .50000 .29412
8	Jhapa	.66714	Bhadrapur	1.0	5 8 3	.72000 .36000 .30000
9	Sunsary	.56763	Dharan	1.0	12 17 5	.39884 .17442 .15698
10	Morang	.81338	Biratnagar	1.0	20 6 9	.21077 .11944 .07026
11	Palpa	.56846	Tansen	1.0	10 3 7	.26786 .26786 .10714
12	Kaski	.46969	Pokhara	1.0	7 9 15	.26887 .21226 .16981
13	Sirha	.94255	Lahan	1.0	9 5 6	.41379 .36207 .25862

¹The overall sampling fraction for urban areas was 1/111. In each selected ward the probability of selecting a household was calculated so that each urban household had the same probability of selection.

²In addition to being a self-representing ward, this ward has a probability of 6 percent to be selected twice in the sample.

APPENDIX 5
NCPS QUESTIONNAIRES



CONFIDENTIAL

NEPAL CONTRACEPTIVE PREVALENCE SURVEY
1980/1981

QUESTIONNAIRE

HIS MAJESTY'S GOVERNMENT OF NEPAL
MINISTRY OF HEALTH
NEPAL FAMILY PLANNING AND MCH PROJECT
PLANNING RESEARCH AND EVALUATION DIV.
RAM SHAH PATH
KATHMANDU, NEPAL

HOUSEHOLD SCHEDULE

HOUSEHOLD No. _____ District _____

PANCHAYAT _____ Ward No. _____

SAMPLE POINT No. _____

Interviewer: List members and those who have slept last night
in the household.

FOR CODERS
USE ONLY

[illegible]

TOTAL NUMBER OF MARRIED FEMALES AGED 15-49 INTERVIEWED: _____

IDENTIFICATION				
HOUSEHOLD NO. _____	DISTRICT _____			
PANCHAYAT: _____	WARD NO. _____			
SAMPLE POINT NO. _____	SERIAL NO. OF INTERVIEWED FEMALE _____			
Visit Record	1	2	3	4
Date				
Inter- viewer's name				
Language used				
Results				
Result Codes: 1. Completed _____ 2. Respondent not at home _____ 3. Incomplete _____ 4. Refused _____ 5. Not eligible _____ 6. Other _____ (Specify)				
Questionnaire Edited Coded _____ _____ _____ Name: _____ Date: _____				

1

1

2 3 4 5

6 7 8

Sample Pt.

9

10 Month Year 11

14

16

17

INDIVIDUAL QUESTIONNAIRE

SECTION I. - BACKGROUND OF RESPONDENT

101. In what month and year were you born? (Use Nepalese Calendar)

Year _____ Month _____ Don't know _____

18 Yr. Mo.

102. How old are you? _____
(Completed age)

22

103. Have you ever attended school?

Yes

No---(SKIP TO Q.105)

24

104. What was the highest class you completed? _____

Interviewer: Tick Appropriate box

Up to 3 years of ☐
schooling

4 or more years of ☐
schooling

(SKIP TO Q.107)

25

105. Can you read a letter:

☐ Yes

☐ No----- (SKIP TO Q.107)

27

106. Can you write a letter?

☐ Yes

☐ No

28

107. Has your husband ever attended school?

☐ Yes

☐ No----- (SKIP TO Q.109)

☐ Don't Know

29

108. What was the highest class he completed? _____

30

Interviewer: Tick appropriate box

Up to 3 years of ☐

4 or more years of ☐

(SKIP TO Q.111)

109. Can your husband read a letter?

Yes ☐

No ☐

(SKIP TO Q.111)

32

110. Can your husband write a letter?

Yes ☐

No ☐

33

111. Aside from housework, do you do any work?

Yes ☐

No ☐

(SKIP TO Q.113)

34

112.A. What kind of work do you do? _____

35

B. Do you get paid in cash or kind? ☐ Yes ☐ No

36

113. What is your ethnic group? _____

37

114. What is the language you usually speak at home?

39

115. How many children do you have? (only currently living)

Number of Living Children

None ☐

(SKIP TO Q. 118)

41

116a How many children live with you

Total _____

116b. How many do not live with you? _____

SUM 116A AND 116B AND VERIFY WITH 115. IF THERE IS ANY DISCREPANCY, ASK AGAIN AND CORRECT.

117. How many sons and how many daughters do you have?

Total _____ Sons _____ Daughters _____

SUM SONS AND DAUGHTERS AND VERIFY WITH Q.115

☐ ☐
43 Sons

☐ ☐
45 Daughters

118. Do you have any children who have died even though the child lived for only a short time?

Yes ☐

No ☐

(SKIP TO Q120)

☐
47

119. How many sons and daughters have died?

Total _____ Sons _____ Daughters _____

☐ ☐
48 Total

☐
50 Sons

☐
51 Daughters

INTERVIEWER: SUM ANSWER TO Q. 115 AND Q.119 AND ENTER TOTAL IN BLANK SPACE BELOW.

Just to make sure, you have had _____ live births. Is it correct?

Yes ☐

No ☐

(PROBE AND CORRECT Q.115 AND Q.119)

120. Are you pregnant now?

Yes ☐

No ☐

Don't know ☐

☐
52

121. In the past five years did you have any live birth?

Yes ☐

No ☐

(SKIP TO Q. 132)

122. How many live births have you had in the last five years? _____

(ASK FOR EVERY BIRTH THE QUESTIONS ON BIRTH HISTORY)

☐
53

Question	BIRTH HISTORY				2 Card 2 Quest. No. 6 S.P.
	Most Recent Birth	Next Most Recent Birth	Third Most Recent Birth	Least Recent Birth	
123. In what year was he/she born?	Year	Year	Year	Year	13 15 17 19
124. In what month was he/she born? (IF DON'T KNOW IN Q.123 ASK Q. 125)	Month	Month	Month	Month	21 23 25 27
125. How many years ago was that child born?	Years	Years	Years	Years	29 31 33 35
126. Did you breastfeed that child? (IF YES IN Q.126 GO TO Q.127, IF NO GO TO Q.128)	Yes No	Yes No			39 41 43 45
127. How many months did you breastfeed?	Months	Months			47
128. Is that child living now? (IF NO IN Q.128)	Yes No	Yes No	Yes No	Yes No	31
129. In what year did that child die?					35
130. In what month did that child die (IF DON'T KNOW IN Q.129 ASK Q. 131)					39 41 43 45
131. For how long was he/she alive?					47

INTERVIEWER ASK: Did you have any other live births you have given birth to in the past five years?

Yes ☐

No ☐

IF "YES", CORRECT ANSWER 123 AND ASK NECESSARY QUESTIONS.

132. Do you want (more) children(excluding current pregnancy)?

Yes ☐

No ☐

Don't Know ☐

} -----(SKIP TO Q.135)

☐
51

133. How many (additional) children do you want?

Total _____ Sons _____ Daughters _____

No preference ☐

☐ Total
52

☐ Sons
53

☐
54

134. If it were entirely up to you when would you like to have your next (first) child?

1. As soon as possible ☐

2. In the next year ☐

3. In two years ☐

4. In three years or more ☐

5. More than 3 years ☐

6. Whenever it happens ☐

8. Don't know ☐

☐
55

135. Have you or your husband ever talked about the size of family you want?

Yes ☐

No ☐

☐
56

TABLE I

Method	(1) 201. Have you heard of family planning method? If "Yes" what are they? If "No" skip to Q.202.	(2) 202. Have you heard () name of each method not circled in column 1.	(3) 203. Have you or your spouse ever used () name of each method circled "Yes" in column 1 & 2.	(4) 204. What method are you currently using to prevent pregnancy?	Knowledge 57 59 61 63 65 67 69 71	Ever Use 58 60 62 64 66 68 70 72
01. Pill	1 Yes	2 Yes 3 No	1 Yes 2 No	1 Yes	☐	☐
02. Condom	1 Yes	2 Yes 3 No	1 Yes 2 No	1 Yes	☐	☐
03. IUD	1 Yes	2 Yes 3 No	1 Yes 2 No	1 Yes	☐	☐
04. Female Sterilization	1 Yes	2 Yes 3 No	1 Yes 2 No	1 Yes	☐	☐
05. Male Sterilization	1 Yes	2 Yes 3 No	1 Yes 2 No	1 Yes	☐	☐
06. Injectables	1 Yes	2 Yes 3 No	1 Yes 2 No	1 Yes	☐	☐
07. Traditional Methods (Specify)	1 Yes	2 Yes 3 No	1 Yes 2 No	1 Yes	☐	☐
08. Other (Specify)	1 Yes	2 Yes 3 No	1 Yes 2 No	1 Yes	☐	☐

Interviewer: If the respondent knows no method (no "yes" codes in column 1 or 2, terminate interview.
If the respondent has never used a method (no "yes" code in column 3) go to instructions on page 9.

Current Method
73 ☐ 74 ☐

TABLE II

INTERVIEWER: IF RESPONDENT HAS KNOWLEDGE OF METHODS 01-06 ("YES" CODES CIRCLED IN COLUMN 1 OR 2) CIRCLE THE METHOD AT THE TOP OF TABLE II.

INTERVIEWER: IF RESPONDENT IS CURRENTLY USING ("YES" CODE IN COLUMN 4 TABLE I) CROSS OUT (X) THAT METHOD AT THE TOP OF TABLE II.

INTERVIEWER: FOR EACH METHOD CIRCLED BUT NOT CROSSED OUT ASK Q.205 AND CIRCLE THE APPROPRIATE ANSWER FOR EACH METHOD CIRCLED AND CROSSED OUT ASK Q.207 - 211.

		Pill	Condom	IUD	Female Ster.	Male Ster.	Inject.
205.	Do you know where you or your spouse can get method _____? (if no skip to Q.212 after asking about each method known)	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No	1 Yes 2 No
206.	If you wanted to get (_____) method to what place would you go?						
207.	How much do _____ (method) cost there? IF FREE GO TO Q.209	Per Cycle Free	Rs _____ for _____				
208.	Is this price expensive or inexpensive? 1. Expensive 2. Inexpensive 4. Don't know						
209.	How would you get to that place to get (method)?						
210.	How long would it take you to get there?						
211.	Would you consider this place convenient or inconvenient? 1. Convenient 2. Inconvenient 3. Don't know						

3

2

6

9

15

21

23

25

26

27

33 36

39 42

45 48

51

212. If you want family planning information what channel of information you prefer?

- Radio ☐
 Health Worker ☐
 Committee Meeting ☐
 Cinema/movie ☐
 Pamphlet ☐
 Poster ☐
 Others (SPECIFY) ☐

☐
57

INTERVIEWER: CIRCLE BELOW THE METHOD THE RESPONDENT IS CURRENTLY USING FROM COLUMN 4 OF TABLE I. IF RESPONDENT IS CURRENTLY USING NO METHOD, CIRCLE 98 (NONE) IN TABLE III BELOW.

TABLE III

- | | | |
|-----------------------------|---|---------------------|
| 01 Pill | } | ----(SKIP TO Q.213) |
| 02 Condom | | |
| 03 IUD | } | ---(SKIP TO Q.214) |
| 04 Female Sterilization | | |
| 05 Male Sterilization | | |
| 06 Injectables | | |
| 07 Other _____
(Specify) | | ----(SKIP TO Q.219) |
| 98 None ----- | | (SKIP TO Q.221) |

213. If you would like to have additional family planning supplies, where would you prefer to go to get them?

- Clinic/hospital ☐
 Shop ☐
 Home (delivery) ☐

☐
58

214. Has the family planning worker visited you within the last three months?

Yes ☐ No ☐

☐
59

215. You told me that you used (method), did you experience any side-effects?

Yes ☐ No ☐
 SKIP TO Q. 218

☐
60

216. What are they? _____

☐
61

217. With whom did you talk about that side-effect? _____

☐
63

218. Where did you or your spouse get (method)?

Health post/hospital ☐ Others ☐
Drugstore ☐
General shop ☐
Family planning center ☐
Mobile camps ☐

☐
64

219. Have you ever gotten pregnant while using a family planning method?

Yes ☐ No ☐

☐
65

220. Which method was that?

Pill ☐
Condom ☐
IUD ☐
Female Sterilization ☐
Male Sterilization ☐
Injectables ☐
Traditional Methods ☐
Other _____ (SPECIFY) ☐

☐
66

TERMINATE INTERVIEW

221. Up to now, what is the reason for not using a family planning method?

Desire additional children ☐ Not needed ☐
Health condition ☐ Desire son ☐
Services or method not available ☐ Other _____ (SPECIFY) ☐

☐
68

PROBE: Are there any other reasons?

222. Have you or your spouse thought of using any family planning method in the future?

Yes ☐ No ☐ Don't know ☐

☐
70

INTERVIEWER'S OPINION:

- With what probe or question was the age of respondent found? ☐
71
- What was your opinion about the reliability of answers given by respondents on the following questions:

202. Prompted Knowledge

1 2 3 4 5 6 7 8 9
Unreliable Reliable

☐
72

203. Ever use

1 2 3 4 5 6 7 8 9
Unreliable Reliable

☐
73

204. Current Use

1 2 3 4 5 6 7 8 9
Unreliable Reliable

☐
74

- Overall cooperativeness in interview

1 2 3 4 5 6 7 8 9
Uncooperative Cooperative

☐
75

- Who was present during family planning questions?

Nobody present ☐ Husband ☐ Other male ☐
Children ☐ In-laws ☐ Other female ☐

☐ ☐
76

गोप्य
अनुसन्धान कार्यको लागि
मात्र प्रयोग गरिने

नेपालमा गर्भ निरोधक साधनहरूको
प्रचलन सर्वेक्षण

२०३७।३८

प्रस्तावली

श्री ५ को सरकार
स्वास्थ्य मन्त्रालय
नेपाल परिवार नियोजन तथा मातृ शिशु कल्याण योजना
योजना, अनुसन्धान तथा मुल्यांकन महाशाखा
रामशाहपथ, काठमाडौं
नेपाल

परिवार लगत				कोडगर्नकी लागीमात्र
परिवार नं. :		जिल्ला :		
पंचायत :		वडा नं. :		
साम्पल प्वाइन्ट नं. :				
<u>प्रश्नकर्ता : गर राति त्यस घरमा सुतेका सबै व्यक्तिहरूलाई यस लगतमा समावेश गर्ने ।</u>				
१. जम्मा परिवार संख्या :				
२. परिवारमा भएका जम्मा पुरुषहरूको संख्या :				
३. परिवारमा भएका जम्मा विवाहित पुरुषहरूको संख्या :				
४. परिवारमा भएका जम्मा महिलाहरूको संख्या :				
५. परिवारमा भएका जम्मा विवाहित महिलाहरूको संख्या :				
<u>प्रश्नकर्ता: गर राति त्यस घरमा सुतेका प्रत्येक विवाहित महिलाहरूलाई तलको तालिकामा समावेश गर्ने ।</u>				
क्र.स.	विवाहित महिलाहरूको नाम	पुरागेरि उमेर	१५-४९ वर्षका विवाहित महि ला भएमा यस्ता ✓ चिन्ह दिने	अन्तर्जातार्ति पुराभएको/ नभएको
१५-४९ वर्षका जम्मा विवाहित महिलाहरूको संख्या :				
१५-४९ वर्षका विवाहित महिलाहरूलाई अन्तर्जातार्ति लिइको संख्या :				

परिचयात्मक विवरण					कोडिंगकी लागीमात्र												
परिवार नं : पंचायत : साम्पल प्लॉट नं. :	जिला : वडा नं. : उक्त महिलाको क्रमांक :				1 1 2 5 6 8												
अन्तर्खार्ता लि गएको पटक	१	२	३	४	9 10 13												
मिति :					14												
अन्तर्खार्तालिको नाम					16												
अन्तर्खातामा प्रयोगगएको भाषा					17												
परिणाम																	
परिणाम सक्ति : १. अन्तर्खार्ता पुरा भएको २. उक्त महिला घाभा नभएको ३. अन्तर्खार्ता पुरानभएको (अधुरी) ४. अन्तर्खार्तादिन नमानेको ५. अन्य(बुलाएलेखे) _____																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;"></th> <th style="width: 30%;">प्रस्तावली जाँच गएको</th> <th style="width: 30%;">सम्पादन गएको</th> <th style="width: 25%;">कोड गएको</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">नाम</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">मिति</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>							प्रस्तावली जाँच गएको	सम्पादन गएको	कोड गएको	नाम				मिति			
	प्रस्तावली जाँच गएको	सम्पादन गएको	कोड गएको														
नाम																	
मिति																	

खण्ड १ उत्पादाताको पृष्ठभूमि

१०१ तपाईंको जन्म कहिले भएको थियो ? (विश्रम संवत्मा लेख्ने)

साल _____ महिना _____ थाराकैत ☐

१०२ तपाईं कतिवर्षाको हुनुभयो ?

(पुरानोको वर्षा)

यदि उत्पादाताको उमेर १५-४६ वर्षा भित्र रहेनछ भने अन्तर्वाता यहीँ देखाउने ।

१०३ तपाईंले स्कुलमा पढ्नु भयो कि भएन ?

पढे ☐ १

पढिन ☐ २

(१०५ सोध्नुस)

१०४ तपाईंले कति पढ्नु भएको छ ?

(पास गरेको कदालेख्ने)

प्रश्नकर्ता: प्रश्न नं १०४ को आधारमा तलदिईसको उपयुक्त वाक्यमा चिन्हो लगाउने ।

तिनकदा सम्म ☐

चार वा सो भन्दा ☐

पास गरेको

वढी कदापास भएको

(१०५ सोध्नुस)

(१०७ सोध्नुस)

१०५ तपाईं चिठ्ठीपत्र पढ्न सक्नु हुन्छ ?

सक्छु ☐ १

सकिदैन ☐ २

(प्र नं १०७ सोध्नुस)

१०६ तपाईं चिठ्ठीपत्र लेख्न सक्नु हुन्छ ?

सक्छु ☐ १

सकिदैन ☐ २

कोडगर्नको
लागीमात्र

☐ ☐ ☐ ☐
१३ २१

☐ ☐
२२

☐
२४

☐ ☐
२५

☐
२७

☐
२८

१८७ तपाईंको श्रीमान । लौगले स्कुलमा पढनु भएको थियो कि थिएन ?

थियो ☐ 1

थिएन ☐ 2

थाहाछैन ☐ 8

(१०६ सोध्नुस)

(१०६ सोध्नुस)

१०८ उहाँले कति पढनु भएको छ ?

(पास गरेको कक्षा लेख्ने)

प्रश्नकर्ता: प्रश्न नं. १०८ को आधारमा तल दिईएको उपयुक्त
वाक्यमा चिन्हो लगाउने ।

तिन कक्षा सम्म पास ☐

चार वा सो भन्दा ☐

गएको

वढी कक्षापास गएको

(१०६ सोध्नुस)

(१११ सोध्नुस)

१०९. तपाईंको श्रीमानले । लौगले चित्रीपत्र पढन सक्नु हुन्छ ?

सक्नुहुन्छ ☐ 1

सक्नुहुन्न ☐ 2

(१११ सोध्नुस)

११० तपाईंको श्रीमानले । लौगले चित्रीपत्र लेख्न सक्नु हुन्छ ?

सक्नुहुन्छ ☐ 1

सक्नुहुन्न ☐ 2

१११. आफ्नो घरको काम बाहेक अरु तपाईं अरु कुनै काम गर्नु हुन्छ कि हुदैन ?

गर्छु ☐ 1

गार्दैन ☐ 2

(११३ सोध्नुस)

११२. क. के काम गर्नु हुन्छ ? _____

११२. ख. यसबाट आम्दानी हुन्छ वा हुदैन ?

हुन्छ ☐ 1

हुदैन ☐ 2

११३. तपाईंको जात । जाति कुन हो ? _____

११४. तपाईंको घरमा बोल्ने भाषा कुन हो ? _____

कीडार्नको
लागीमात्र

☐
२९

☐
३०

☐
३२

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३३

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३४

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३५

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३६

☐
३७

☐
३९

११५ तपाईंको कति जना छोराछोरी छन ? (हाल जिवित भएकी मात्र)

छोराछोरी कैन्

_____ जना छोराछोरी

(११८ सोध्नुस)

११६ क तपाईंसँग वस्ने छोराछोरीहरू कति जना छन ?

_____ जना

११६ ख तपाईंसँग नवस्ने छोराछोरीहरू कति जना छन ? _____ जना

(प्रश्नकर्ता: ११६ क र ११६ ख को जवाफहरू को जोड ११५ सँग

मिल्छ कि मिल्दैन यदि मिल्दैन भने प्रश्न गरि सच्याउनुस)

११७ तपाईंको कति जना छोरा र कति जना छोरी छन् ?

जम्मा _____ छोरा _____ छोरी _____

(प्रश्नकर्ता: जम्मा छोराछोरीहरूको संख्या ११५ सँग मिल्छ कि

मिल्दैन हेर्नुस मिल्दैन भने प्रश्न गरि सच्याउनुस)

११८ तपाईंको जिउदो जन्मेका छोराछोरीहरूमध्ये कोहि मरेका । खेर गएका पनि थिए कि ?

थिए

थिएन (१२० सोध्नुस)

११९ कति जना छोरा कति जना छोरी मरेका थिए ?

जम्मा _____ छोरा _____ छोरी _____

प्रश्नकर्ता: ११५ र ११९ का उत्तरहरूलाई जोडेर तलको सारी

ठाउमा भर्नु सौध्नुस ।

तपाईंले अठे सम्म जिउदो जन्माएका छोराछोरीहरूको संख्या

जना लेख्ने के यो ठिक छ ?

ठिकछ

ठिकछैन

(कैन भनेमा ११५ देखि ११९ को प्रश्न
हरू फेरि सोधि सच्याउनुस)

१२० तपाईं हाल गर्भवति/(दुई जिउकि) हुनुहुन्छ ?

हो

कैन

थालाकैन

कोठामा
लागी मात्र

प्रश्नकर्ता: ११५ र ११६ हेरी तलको वाक्समा चिन्हो लगाउने

जिवित वच्चा जन्मेको ☐ जिवित वच्चा नजन्मेको ☐

प्रश्न नं १२१ मा जाने प्रश्न नं १३२ मा जाने

१२१. गस्को पाच वर्षमा तपाईले कुनै जित्दो वच्चा जन्माउनु भएको थियो ?

थियो ☐ थिएन ☐ → १३२ मा जाने

१२२. जम्मा कति जना जीउदो वच्चा जन्माउनु भएको थियो _____ जना
 (सकभन्दा पछिलो देखि होक लाई जन्म तालिकाको प्रश्नहरू सोधिभर्नुस)

जन्म तालिका

	सकभन्दा पछिलो १	२	३	४
१२३ कुनसालमा तपाईंको () वच्चा जन्मे ?				
१२४ कुन महिनामा त्यो वच्चा जन्म्यो ?				
प्र १२३ मा थाहा छैन भन्नेलाई मात्र)				
१२५ कतिवर्षा पहिले त्यो वच्चा जन्मेको थियो ?				
१२६ तपाईले त्यो वच्चा लाई आफ्नो दुध खाउनु भो ?	खार १ खाईन २	खार १ खाईन २		
प्रश्न १२६ मा खार भन्नेलाई				
१२७ कति महिना खाउनु भो ?				
१२८ त्यो वच्चा हाल जिवित छ ?	छ १ छैन २	छ १ छैन २	छ १ छैन २	छ १ छैन २
१२८ मा छैन भन्नेलाई मात्र)				
१२९ कुनसालमा त्यो वच्चा मेरो हो ?				
१३० कुन महिनामा त्यो वच्चा मेरो हो ?				
प्रश्न १२९ मा थाहा छैन भन्नेलाई मात्र)				
१३१ त्यो वच्चा कति समय सम्म बाच्नो ?				

कोड गर्नको लागि मात्र

☐ 53

☐ 2

☐ 1

☐ 4 5

☐ 6 8

☐ 9 12

☐ 13 16

☐ 17 20

☐ 21 24

☐ 25

☐ 27 30

☐ 31 34

☐ 35 38

☐ 39 42

☐ 43 46

☐ 47 50

પ્રશ્નકર્તા: સોધનુસ

કોહાકો
રાગીમાત્ર

અધિ મન્નુ મસ્કો _____ જના વચ્ચાહુ વાહુક ગસ્કો પાત્ર વર્ષ મિત્ર
મા અરુ કુતે જિત્તો વચ્ચા જન્માત્તુ મસ્કો છ ?

હ ☐

કેન ☐

હ મન્ને જવાપ આસ્મા પ્રશ્ન ને ૧૨૨ મા સચ્ચાઈ હુટેકો લાઈ ફેરિ
પ્રશ્ન ૧૨૨ દેસિ ૧૩૧ સોધનુસ ।

૧૨૨ તપાઈલાઈ (અરુ) કોરાહોરીકો ર્ચ્ચા હ ? (ઝેલે કો ગર્મ વાહેક)

હ ☐ 1

કેન ☐ 2

થાહાકેન ☐ 3

(૧૩૫ સોધનુસ)

(૧૩૫ સોધનુસ)

૧૨૩ તપાઈલાઈ (અરુ) કતિ જના કોરાહોરીકો ર્ચ્ચા હ ?

જમ્મા _____

કોરા _____

કોરી _____

જે મર પનિ હુન્ક ☐

૧૨૪ વચ્ચા જન્માત્તે વા મજન્માત્તે કુરા યદિ તપાઈકો આફૂને
હાતમા મર, તપાઈલે અર્કો । પહિલી વચ્ચા કહિલે જન્માત્ત
ચાહુ હુન્ક ?

૧ સકેસમ્પ ચાહી

☐ 1

૨ અર્કો વર્ષમા

☐ 2

૩ દુઈ વર્ષ મિત્ર

☐ 3

૪ તિત વર્ષ મિત્ર

☐ 4

૫ તિત વર્ષ પહિ

☐ 5

૬ જાહિલે મર પનિ હુન્ક

☐ 6

૭ થાહાકેન

☐ 3

૧૨૫ કતિ જના કોરાહોરી મર વેશ હુન્ક મન્ને કુરામા તપાઈ ર તપાઈકો
શ્રીમાતલે । હોગિલે કહિલે કુરાકાની ગર્મ મસ્કો હ ?

હ ☐ 1

કેન ☐ 2

☐
51

☐ ☐ ☐
53 54

☐
55

☐
56

खण्ड २ प्रजनन प्रक्रिया					
तालिका - १					
साधन	२०१ तपाईले पाई वर्ग निपोजनको उपाय वा साधन हरे वर्ग सन्तुभरको कै छ भने के के ? कैने भने प्रश्न नं २०२ सोध्ने १	२०२ तपाईले (प्र नं २०१ मा गीली नलगाईएको प्रत्येक साधनको नाम राखि खेर सोध्ने) सन्तुभर को छ ?	२०३ तपाई वा तपा ईकी जहानले (प्र २०१ २ २०२ मा क भन्ने मा चिन्ही लगाएको साधनको नाम राखि सोध्ने) प्रयोग गर्नुभर को थियो ? ३	२०४ अरु तपाई वा तपाईकी श्रीमान सोचने कुनै साधन प्रयोग गरिरहनु भर को छ ?	कारुणिको आगीमात्र
०१. शान्ति चक्की	१ क	२ क ३ कैने	१ थियो २ थिएन	१ क	57
०२. कण्डम	१ क	२ क ३ कैने	१ थियो २ थिएन	१ क	58
०३. लुप	१ क	२ क ३ कैने	१ थियो २ थिएन	१ क	59
०४. महिला वन्ध्याकरण (अपरेशन)	१ क	२ क ३ कैने	१ थियो २ थिएन	१ क	60
०५. पुरुष वन्ध्याकरण (अपरेशन)	१ क	२ क ३ कैने	१ थियो २ थिएन	१ क	61
०६. गर्भनिरोधक सुई	१ क	२ क ३ कैने	१ थियो २ थिएन	१ क	62
०७. अरु गाउघरमा पाउने साधन (उल्लेख गर्नु)	१ क	२ क ३ कैने	१ थियो २ थिएन	१ क	63
०८. अरु उल्लेख गर्नु _____	१ क	२ क ३ कैने	१ थियो २ थिएन	१ क	64
				६८ कुनैपनि प्रयोग नैगएको	65
प्रश्नकर्ता: यदि उत्तरदातालाई कुनै पनि साधन वा धाकाको भन्ने कलम १ वा २ को कुनै पनि ह मा लिना नलगाईएको भए) प्र नं २१२ सोध्ने अन्तर्गत यस्तै सन्तुभर । यदि उत्तरदाताले कुनै पनि साधन प्रयोग गरेको थियो भने कलम २ को कुनै पनि थियो मा लिना नलगाईएको भए) तालिका २ सोध्ने ।					

प्रश्नकर्ता: यदि उत्पादातालाई तालिका - १ को ०१-०६ मा उल्लेखित साधनहरू वारे घोसा छ भने (कलम १ वा २ को छ मा गीलो लगाएको भए) तालिका नं. २ को उक्त साधन माथिकी अंकलाई गीलो लगाउनीस ।

प्रश्नकर्ता: यदि उत्पादाताले हाल पछिबार नियोजनकी कुनै साधन प्रयोग गरिरहेको भए (तालिका -१ को कलम -४ को ०१-०६ को साधन मध्ये कुनै एकको छ मा चिनी लगाएको भए) तालिका-२ मा उल्लेख गरिएको साधनको माथि भएको गीलोमा यसरी ⊗ चिनी लगाउनीस ।

प्रश्नकर्ता: गीलो लगाएको तर नकाटिएको प्रत्येक साधनको वारिमा प्रश्न नं २०५ देखि सीधनीस र उपयुक्त जवाफ मा गीलो लगाउनीस । गीलो लगाएको र काटिएको साधनकी लागी प्रश्न नं २०७ देखि मात्र सीधनीस ।

तालिका २							कोडगर्भकी लागीमात्र
	०१ सानेचक्की	०२ कण्डम	०३ लुप	०४ महिला वन्ध्या करण अपरेशन	०५ पुरुष वन्ध्या करण अपरेशन	०६ गर्भनिरो धक सुई	3 1 2 5 6 8 9 11 12 14 15 17 18 20
२०५. तपाईंलाई (साधन) कसोपार्नेछ थाहा छ ?	१ छ २ छैन	१ छ २ छैन	१ छ २ छैन	१ छ २ छैन	१ छ २ छैन	१ छ २ छैन	3 1 2 5 6 8 9 11 12 14 15 17 18 20
२०६. तपाईंलाई (साधन) चाहिएमा कसालिने जान्नुहुन्छ ?							
१. अस्पताल	१	१	१	१	१	१	
२. मोबायल फोन	२	२	२	२	२	२	
३. किराना फोन	३	३	३	३	३	३	
४. पब्लिक हेल्थ	४	४	४	४	४	४	
५. घुम्ती टोली	५	५	५	५	५	५	
६. अरु	६	६	६	६	६	६	
२०७. (साधन) किन कति लाग्छ ?	प्रति साइकल सिस्तेमा	प्रति साइकल सिस्तेमा					21 23 25
सिस्तेमा पाउने मन्नेलाइरु							
५. २०६ मा जाने							
२०८ तपाईंलाई यसको मोल कस्तो लाग्छ ?	१	१					
१. महँगो २. सस्तो	२	२					
३. ठिकै ४. थाहा छैन	३	३					
	४	४					
२०९ तपाईं त्यो (साधन) पाउने ठाउँमा कसरी जान्नुहुन्छ/जान्नुभयो ?	१	१	१	१	१	१	27 29 30 32
१. मोटर २. पैदल	२	२	२	२	२	२	
३. टिक्सा ४. अरु	३	३	३	३	३	३	
२१०. त्यो ठाउँमा पुग्ने तपाईंलाई कति बेर लाग्छ ?							33 34 35 37 39 40 42 43 44 45
२११. तपाईंलाई त्यो ठाउँमा पुग्ने सजिलो छ ?	१	१	१	१	१	१	
१. छ २. छैन	२	२	२	२	२	२	
३. थाहा छैन	३	३	३	३	३	३	

२१२. परिवार नियोजनको विषयमा धोलाई धाहा दिन के गरी देश होला ?

१. रेडियो ४. सिनेमा ७. अरु _____
 २. स्वास्थ्य कार्यकर्ता ५. पाम्फ्लेट
 ३. सामुदायिक क्लफ़ ६. पोष्टर

कोडगर्नको
लागीमात्र

☐
57

प्रश्नकर्ता: तालिका १ को कलम ४ हेर्नासि र उवखदाताले हाल प्रयोग गरिरहेको साधन अधिलक्षिकी अंकमा गीलो लगाउनीस र तालिका ३ को निर्देशन अनुसार प्रश्नहरू सोधनीस । यदि उवखदाताले हाल कुनै पनि साधन प्रयोग नगरेको भए तालिका ३ को ६८ मा (कुनै पनि प्रयोग नगरेको) गीलो लगाउनीस ।

तालिका - ३

०१. खाने चक्की	}	→ प्र.नं. २९३ सोधनीस
०२. कण्डम		
०३. लुप	}	→ प्र.नं. २९४ सोधनीस
०४. महिला बन्ध्याकरण		
०५. पुरुष बन्ध्याकरण		
०६. गर्भनिरोधक सूई		
०७. अरु _____	→	प्र.नं. २९६ सोधनीस
६८. कुनै पनि प्रयोग नगरेको	→	प्र.नं. २२९ सोधनीस

२१३. तपाईंलाई परिवार नियोजनको साधन अरु चाहिएमा कहा लिन जान मनपराउनु हुन्छ ?

क्लिनिक ☐ १

फसर ☐ २

घरमा ☐ ३

☐
58

२१४. परिवार नियोजनमा काम गर्ने मानिस गरेको तिन महिनामा तपाईं कहा आस्की थियो कि ?

थियो ☐ १

धिएन ☐ २

☐
59

२१५. तपाईले (साधनकी नाम) प्रयोग गर्नु भएको रहेछ, के तपाईं ठाई यसले कुनै विचार गरीको छ ?

कु

केन

(प्र. नं. २१८ मा जानुस)

२१६. तपाईंलाई कस्तो विचार भएको छ ? _____

२१७. त्यो विचार बारि तपाईंले को संग कुराकानी गर्नुभयो ? _____

२१८. तपाईंले वा तपाईंको श्रीमानले । लोभले _____ कहावाट लिनुभयो ?
(साधन)

२१९. परिवार नियोजनको साधन प्रयोग गर्दा गर्दै पनि तपाईं कहिल्यै गर्भवति । दुईजनाको हुनु भएको थियो ?

थिए

थिएन

२२०. कुन साधन प्रयोग गर्दा भएको थियो ? _____ (साधन)

अन्तर्वार्ता यहि दुग्याउने

२२१. अस्सम्म तपाईंहरूले परिवार नियोजनको कुनै पनि साधन प्रयोग नगर्नाको के कारण होला ?

१. सन्तानकी ईच्छा

४. साधन नपाएको १६. कोराकी इच्छा

२. स्वास्थ्य साराव हुने

८. आवश्यक नभएको ३२. अरु _____

(सोध्नुसः यी कारणहरू बाहेक अरु कुनै कारण कुन कि ?)

२२२. तपाईं वा तपाईंको श्रीमानले । लोभले पछि कुनै बेला परिवार नियोजनको साधन प्रयोग गर्ने विचार गर्नुभएको छ ?

कु

केन

थाहाकेन

अन्तर्वार्ता दुग्याउने

कोङ्गर्को
ठागीमात्र

प्रश्नकर्ताको मन्तव्य

१. कुन शब्द अथवा प्रश्नवाट उत्तरदाताको उमेर थाहा पाएको ? _____

कोडगर्तको
लागीमात्र

☐
71

२. परिवार नियोजन सम्बन्धि भिन्न प्रश्नहरूको उत्तरदिदा उत्तरदाता प्रति तपाईंको धारणा के छ ?

प्रश्न नं. २०२ (प०नि०वारे सुनेको)

कम भाषदो

बढि भाषदो

१ २ ३ ४ ५ ६ ७ ८ ९

☐
72

प्रश्न नं. २०३ (प०नि०प्रयोग)

१ २ ३ ४ ५ ६ ७ ८ ९

☐
73

प्रश्न नं. २०४ (प०नि०हाल प्रयोग)

१ २ ३ ४ ५ ६ ७ ८ ९

☐
74

३. उत्तरदाताको सहयोगको भावना कस्तो छ ?

कम

बढि

१ २ ३ ४ ५ ६ ७ ८ ९

☐
75

४. प०नि०सम्बन्धि प्रश्नहरू गर्दा उपस्थित व्यक्तिहरू

कोहि नभएको ☐ ०

वच्चाहरू ☐ १

श्रीमान ☐ २

☐
76

सासु ससुरा ☐ ४

अरु पुरुष ☐ ८

अरु महिला ☐ १६

INTERVIEWER'S DAILY RECORD

Interviewer's Name:

Activities			Household Interview			Individual Interview	Remarks
Date	Family No.	Result	No. of Respondents	Respondent S.N.	Result	Questionnaire; Date Returned to Supervisor	

APPENDIX 8

Errors found while Check-coding

[illegible]

Appendix 9

Percent Distribution and Mean Number of Children Ever Born by Age for Currently Married Women 15-49 Years Old, Nepal, 1981

Age	Total (N)	Children Ever Born							Mean
		0	1	2	3	4	5	6+	
15 - 19	614	70.7	21.5	6.1	1.5	0.2	0.0	0.0	0.39
20 - 24	1,214	22.7	32.7	23.7	13.9	4.6	1.4	1.1	1.53
25 - 29	1,275	7.2	15.5	23.9	21.5	17.4	9.0	5.6	2.79
30 - 34	997	4.5	4.7	12.7	21.1	18.1	16.3	22.6	4.02
35 - 39	753	3.8	4.7	9.4	14.9	16.9	16.2	34.2	4.66
40 - 44	610	3.6	2.7	7.4	9.8	12.2	13.7	50.6	5.51
45 - 49	411	3.2	3.3	5.2	7.0	10.9	13.7	56.6	5.93

Appendix 10

Percent Distribution and Mean Number of Living Children,
Currently Married Women 15-49 Years Old by Age, Nepal, 1981

Living Children	Age						
	15-19	20-24	25-29	30-34	35-39	40-44	45-49
0	73.8	27.6	9.2	7.0	5.2	4.1	5.8*
1-2	24.5	61.7	49.3	28.8	23.6	20.1	16.4
3-4	1.6*	10.1	35.4	42.0	40.8	34.2	32.0
5-6	0.0	0.5*	5.8	19.5	24.4	30.7	32.1
7+	0.0	0.0	0.3*	2.7	6.1	11.0	13.8
Total (N)	616	1,217	1,275	997	753	610	411
Mean ¹	0.34	1.20	2.28	3.16	3.58	4.06	4.25

*Less than 25 cases.

¹Overall mean is 2.49.

APPENDIX 11

Measurement of Fertility in Surveys in Nepal

It is doubtful, but nevertheless possible, that the change in the marital TFR reported in Chapter 5 may be the first evidence of fertility decline in Nepal. Other published estimates showing a fairly constant fertility level in the 70s, the absence of major socio-economic changes, and limited acceptance of family planning tend to reduce the plausibility of an interpretation of actual decline. Furthermore, since the 1976 survey, the percent pregnant by age has not changed dramatically and the reductions in mean children ever born are minor, both of which argue against actual fertility decline. The use of contraception, although improving, remains at low levels, so the family planning program could have only limited direct impact on fertility levels.

Certain other data and additional analysis may help in reaching a better interpretation. Data from the 1981 Census, which are not yet available, will provide information about age at marriage and also fertility rates, which could be compared with the NCPS rates to corroborate or refute them. Age at marriage is of interest because rising age at marriage can be a powerful brake on fertility. Further analysis of NCPS data may reveal some problems, as yet undetected, such as displacement of births (reporting them as having taken place earlier in time than they actually occurred) or a distortion in birth reporting in some area.

Fertility rates on the same data set can vary from one source to another due to the methods of calculation. It is customary to make adjustments to reduce defects in the data, which may be caused by problems associated with data collection, or to increase the precision of the measure (for example, adjusting the age of women at the time of a birth to make the number of women counted in the denominator more accurate). Data for Nepal are no exception, and in view of the difference between the NFS and NCPS marital ASFRs reported in Chapter 5, a presentation of various estimates may help the reader in making his or her own judgement about fertility trends in Nepal.

The rates presented below include both original calculations and published data. Goldman et al (1979) used NFS data on ever-married women, adjusted for age at the time of the birth and for the proportion married in an age group six months prior to the survey, to obtain ASFRs for all women.

A few adjustments were also made to the NCPS data. The purpose of these adjustments was to obtain reasonably comparable denominators for the calculation of the age-specific rates, so that the results of both surveys could be compared.

The adjustments to the NCPS figures for all women approximate but do not follow the Goldman technique exactly. An adjustment was made to the NCPS data for marital status, but no adjustment was made for age or time before the survey, when the birth occurred. To estimate the number of all women, the actual number of currently married women in a given age group was divided by the proportion of currently married women among all women of that age reported in the NFS First Report. Then the number of births to women in the age group was divided by the number of all women (derived from the above procedure). An assumption of no illegitimate births was made. In the accompanying table, both the NFS and CPS data for currently married women are unadjusted.

It can be observed that the NCPS rates are, in most instances, lower than the NFS for each denominator. Further refinement of the NCPS estimates would seem to be advisable. There may be some limitations on the extent of subsequent analysis of the NCPS fertility data, however, since the survey was not intended to collect all fertility variables. In a future CPS in Nepal, it may be worthwhile to add a few additional questions such as age at marriage, to assist in fertility analysis.

If, on the other hand, the NCPS has measured current fertility reasonably well, there are then two questions:

- are we seeing a temporary fluctuation in a period rate, which would be smoothed out in a longer time trend, or
- do the data indicate actual fertility decline?

These questions can only be answered satisfactorily in the future.

<u>Marital Status and Year</u>				
<u>Age</u>	<u>All</u>		<u>Currently Married</u>	
	<u>NFS¹</u> <u>1976</u>	<u>NCPS^{2,3}</u> <u>1981</u>	<u>NFS⁴</u> <u>1976</u>	<u>NCPS³</u> <u>1981</u>
15 - 19	145	94	143	152
20 - 24	290	248	313	268
25 - 29	295	253	315	265
30 - 34	269	197	278	211
35 - 39	169	160	223	178
40 - 44	75	67	112	81
45 - 49	23	34	42	44
TFR	6.3	5.3	7.1	6.0

¹N. Goldman et al. The Quality of Data in the Nepal Fertility Survey, WFS Scientific Reports, 6, International Statistical Institute, Voorburg, The Hague, Netherlands, December 1979, p.21. See also Appendix I for a description of the adjustment procedure used.

²Adjusted rate.

³Births occurring 1 through 12 months before the survey are counted.

⁴Calculations, using the WFS data tape for Nepal (un-weighted), count births occurring 1 through 12 months before the survey.

Appendix 12

Mean Desired Family Size for Currently Married Women 15-49 Years Old by Desire for More Children and Age, Nepal, 1981

<u>Desire for More Children and Age</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Number</u>
<u>Wants More</u>	4.11	1.21	2,920
15 - 19	3.89	1.06	534
20 - 24	3.91	1.08	943
25 - 39	4.35	1.29	1,311
40 - 44	4.32	1.41	105
45 - 49	3.69	1.57	28
<u>Does Not Want More</u>	4.04	1.81	2,340
15 - 19	1.73	1.39	21
20 - 24	2.57	1.06	147
25 - 39	3.94	1.59	1,345
40 - 44	4.55	1.98	464
45 - 49	4.52	2.15	362
<u>Does Not Know</u>	2.44	1.61	510
15 - 19	0.43	0.65	46
20 - 24	1.38	0.96	94
25 - 39	2.87	1.36	315
40 - 44	3.50	2.08	36
45 - 49	3.50	1.90	20

Appendix 13

Percent Distribution of Currently Married Women 15-49 Years of Age by Ethnic Group and Knowledge of Specific Family Planning Methods, Nepal, 1981

<u>Ethnic Group</u>	<u>Total (N)</u>	<u>Female Sterilization</u>	<u>Vasectomy</u>	<u>Pill</u>	<u>Condom</u>	<u>Injectable</u>	<u>IUD</u>	<u>Traditional</u>	<u>Other</u>
Total	5,876	44.0	38.2	25.1	13.6	9.0	8.4	1.5	0.4
Tamang	135	19.6	23.3	9.2	2.2	1.3	0.3	0.2	0.0
Tharu	258	40.9	32.0	17.9	12.8	5.4	3.0	1.5	0.0
Newar	313	52.6	52.9	44.3	33.9	23.3	27.4	1.1	1.0
Magar	318	30.8	29.2	25.5	11.7	6.4	6.6	0.1	0.0
Rai	133	26.2	29.7	27.6	14.2	10.3	12.2	2.4	0.2
Gurung	178	29.0	43.6	29.2	9.9	4.4	3.8	0.7	1.4
Satar	16	51.5	51.5	25.7	0.0	9.5	1.5	24.3	0.0
Sunwar	28	33.6	24.7	23.9	14.2	14.2	18.6	0.0	0.0
Muslim	184	55.2	41.7	19.6	3.7	5.8	2.8	0.8	0.1
Danuwari	10	37.5	12.5	12.5	0.0	0.0	0.0	0.0	0.0
Darai	8	66.7	33.3	16.7	16.7	16.7	16.7	0.0	0.0
Brahman	551	50.6	47.2	38.5	27.6	20.2	22.3	3.1	0.8
Thakuri	100	26.9	26.2	34.3	23.4	2.6	3.9	0.0	0.0
Chhetri	664	40.9	40.5	32.3	18.5	14.0	14.1	1.7	0.7
Others	2,978	47.9	37.0	20.1	9.1	5.8	4.2	1.4	0.3

Note: The actual n upon which a cell percentage was calculated in this table may differ slightly from the n shown in the first column due to nonresponse.

Appendix 14

Percent Distribution of Currently Married Women
Aged 15-49 by Age and Number of Family Planning
Methods Known, Nepal, 1981

<u>Age</u>	<u>Total (N)</u>	<u>Number of Methods Known</u>		
		<u>0</u>	<u>1-3</u>	<u>4-8</u>
15 - 19	615	49.9	39.4	10.7
20 - 24	1,208	48.2	36.8	15.0
25 - 29	1,268	46.2	40.0	13.8
30 - 34	987	47.0	38.5	14.6
35 - 39	749	50.1	38.0	11.9
40 - 44	606	50.4	40.4	9.2
45 - 49	405	50.7	39.8	9.5

Appendix 15

Percent of Currently Married Women 15-49 Years of Age by
Working Status and Husband's Education, Nepal, 1981

<u>Working Status</u>	<u>Husband's Education</u>				
	<u>Illiterate</u>	<u>Literate</u>	<u>Primary</u>	<u>Middle, Secondary</u>	<u>Completed Secondary</u>
Working	60.3	49.6	52.2	46.4	34.5
Not Working	39.7	50.4	47.8	53.6	65.5
Total (N)	3,277	1,049	515	706	290

Appendix 16 Percent Distribution of Currently Married Women 15-49
Years of Age Who Know a Source for Injectables and IUD
by Type of Source and Geographic Region, Nepal, 1981

<u>Source</u>	<u>Method and Region</u>					
	<u>Injectables</u>			<u>IUD</u>		
	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>
Health Post/ Hospital	100.0*	79.0	86.6	50.0*	80.1	80.1
Family Planning Center	0.0	19.8*	9.9*	0.0	18.8*	16.1*
Mobile Team and Other	0.0	1.2*	3.6*	50.0*	1.1*	3.8*
Total (N)	3	109	148	3	113	131

Note: *Less than 25 women.

Appendix 17 Percent Distribution of Currently Married Women
15-49 Years of Age Who Know a Source for
Injectables and IUD by Type of Source and
Residence, Nepal, 1981

<u>Source</u>	<u>Method and Residence</u>			
	<u>Injectables</u>		<u>IUD</u>	
	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Health Post/ Hospital	76.5	87.0	74.5	82.7
Family Planning Center	23.2*	9.4*	25.5*	12.6*
Mobile Team and Other	0.3*	3.6*	0.0	4.7*
Total (N)	85	174	87	160

Note: *Less than 25 women.

Appendix 18 Percent Distribution of Currently Married Women 15-49
Years of Age Knowing a Source for Injectable and IUD
by Mode of Transportation to Source, Method, and
Geographic Region, Nepal, 1981

<u>Transportation</u>	<u>Method and Region</u>					
	<u>Injectable</u>			<u>IUD</u>		
	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>
Walk	33.1*	50.2	35.9	100.0*	54.3	39.3
Gas Vehicle	66.7*	45.5	48.7	0.0	43.9	40.9
Rickshaw	0.0	0.6*	8.8*	0.0	0.2*	13.7*
Other	0.0	3.6*	6.6*	0.0	1.6*	6.1*
Total (N)	4	107	144	4	111	132

Note: *Less than 25 women.

Appendix 19 Percent Distribution of Currently Married Women
15-49 Years of Age Knowing a Source for Injectable
and IUD by Mode of Transportation to Source, Method,
and Type of Residence, Nepal, 1981

<u>Transportation</u>	<u>Method and Residence</u>			
	<u>Injectable</u>		<u>IUD</u>	
	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Walk	38.2	43.7	37.1	52.4
Gas Vehicle	45.2	48.9	43.6	40.5
Rickshaw	14.2*	0.7*	16.6*	2.4*
Other	2.4*	6.7*	2.6*	4.8*
Total (N)	85	170	87	159

Note: *Less than 25 women.

Appendix 20 Percent Distribution of Currently Married Women
15-49 Years of Age Knowing a Source for Injectable
and IUD by Travel Time to Source, Method, and
Geographic Region, Nepal, 1981

<u>Time</u>	<u>Method and Region</u>					
	<u>Injectable</u>			<u>IUD</u>		
	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>
< 30 Minutes	0.0	42.6	28.3	0.0	45.1	35.7
30-59 Minutes	0.0	11.4	15.5*	0.0	12.7*	18.5*
1-3 Hours	66.7*	36.8	44.2	66.7*	33.1	38.8
4+ Hours	33.3*	9.3	12.1*	33.3*	9.1*	7.0*
Total (N)	4	108	146	4	111	125

Note: *Less than 25 women.

Appendix 21 Percent Distribution of Currently Married Women
15-49 Years of Age Knowing a Source for Injectable
and IUD by Travel Time to Source and Type of
Residence, Nepal, 1981

<u>Time</u>	<u>Method and Residence</u>			
	<u>Injectable</u>		<u>IUD</u>	
	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
< 30 Minutes	81.2	10.9*	83.5	14.8*
30-59 Minutes	11.6*	14.5	11.0*	18.0
1-3 Hours	7.3*	58.0	5.5*	54.1
4+ Hours	0.0	16.7	0.0	13.1*
Total (N)	84	174	86	154

Note: *Less than 25 women.

Appendix 22 Percent Distribution of Currently Married Women 15-49 Years of Age Knowing a Source for Injectable and IUD by Perceived Convenience of Source, Method, and Geographic Region, Nepal, 1981

<u>Perceived Convenience</u>	<u>Method and Region</u>					
	<u>Injectable</u>			<u>IUD</u>		
	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>	<u>Mountain</u>	<u>Hill</u>	<u>Terai</u>
Convenient	33.3*	84.1	67.9	66.7*	84.0	76.1
Inconvenient	33.3*	13.3*	24.4	33.3*	13.7*	19.2
Don't Know	33.3*	2.6*	7.7*	0.0	2.3*	4.7*
Total (N)	4	109	151	4	114	134

Note: *Less than 25 women.

When the computer calculates percentages on weighted data and there are very small cell sizes, the percentages will add to 100%, even though the total (N) may not be divisible in whole numbers in the way the cell percents would suggest.

Appendix 23 Percent Distribution of Currently Married Women 15-49 Years of Age Knowing Injectable and IUD by Perceived Convenience of Source, Method, and Type of Residence, Nepal, 1981

<u>Perceived Convenience</u>	<u>Method and Residence</u>			
	<u>Injectable</u>		<u>IUD</u>	
	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
Convenient	93.9	64.5	95.9	70.8
Inconvenient	4.0*	27.7	2.6*	24.6
Don't know	2.1*	7.8*	1.6*	4.6*
Total (N)	86	178	88	164

Note: *Less than 25 women.

APPENDIX 24

Sampling Errors in the NCPS

Basically the results of sample surveys are affected by two types of errors. One is known as nonsampling error, and the other is known as sampling error. Non sampling errors are the result of mistakes made in carrying out different planned activities in sample surveys. In order to minimize the nonsampling errors, extreme care was taken during the implementation of different phases of the survey. Nevertheless one can expect some nonsampling errors to be present in the results. Since nonsampling errors are extremely difficult to measure, it is not possible to assess statistically the level of nonsampling errors in the NCPS.

As mentioned earlier, the results of this study are based on a sample of 5,880 currently married women. Sampling errors provide an estimate of how the obtained results would differ if a repeated sample survey of exactly similar design were carried out. The sampling errors can be measured because they are a function of the sample design. The following tables give an idea of the sampling errors for eleven selected variables for the rural and urban strata.

Brief definitions of the columns in the tables follow:

R = Mean or proportion value of the estimate.

SE = Standard error of the estimate for the specific variables of this study.

N = Unweighted number of cases upon which the estimate is based.

SER = Estimated standard error of R if the sample design had used the simple random sampling method.

DEFT = Design effect, i.e., SE/SER , a ratio between the observed standard error and the expected standard error if the design implemented had been a simple random sample.

SD = Standard deviation defined as $SER\sqrt{N}$.

ROH = The rate of homogeneity in the cluster. It can be calculated with the use of the following formula:

$DEFT^2 = 1 + ROH(b-1)$ where b is the average cluster size.
 $R-2SE, R+2SE =$ the 95% confidence interval.

The abbreviated labels on the far left-hand side of the table stand for the following variables:

EVBO	Number of children ever born
LCHL	Number of living children
LSON	Number of living sons
CPGN	Proportion currently pregnant
BT1Y	<u>Number of births to women in domain in one year</u> Total number of women in domain
BT5Y	<u>Number of births to women in domain in last 5 years</u> Total number of women in domain
DECH	Proportion desiring additional children
FS1Z	Desired family size
MKNW	Proportion knowing a contraceptive method
EVUSE	Proportion ever using contraception
CUSE	Proportion currently using contraception

Means, Standard Errors, and Confidence Intervals
for Selected Variables for Urban Women, NCPS, 1981

	R	SE	N	WN	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	B
EVBO	3 282	0 071	1475 0	1475 0	0 061	2 362	1 161	0 010	0 022	3 139	3 425	35 1
LCHL	2 713	0 061	1475 0	1475 0	0 051	1 944	1 209	0 014	0 023	2 590	2 835	35 1
LSOY	1 412	0 037	1475 0	1475 0	0 032	1 233	1 138	0 009	0 026	1 339	1 487	35 1
CPGN	0 088	0 011	1472 0	1472 0	0 007	0 283	1 534	0 040	0 129	0 065	0 110	35 0
BT1Y	0 185	0 012	1475 0	1475 0	0 010	0 388	1 193	0 012	0 065	0 161	0 209	35 1
BT5Y	0 820	0 025	1475 0	1475 0	0 021	0 798	1 201	0 013	0 030	0 770	0 870	35 1
DECH	0 562	0 017	1474 0	1474 0	0 013	0 496	1 285	0 019	0 030	0 529	0 595	35 1
FSIZ	3 893	0 073	1385 0	1385 0	0 041	1 521	1 778	0 068	0 019	3 748	4 038	33 0
MKNW	0 756	0 026	1475 0	1475 0	0 011	0 430	2 335	0 130	0 035	0 704	0 808	35 1
EVUS	0 293	0 023	1475 0	1475 0	0 012	0 455	1 928	0 080	0 078	0 247	0 339	35 1
CUSE	0 235	0 021	1474 0	1474 0	0 011	0 424	1 890	0 075	0 089	0 194	0 277	35 1

Means, Standard Errors, and Confidence Intervals
for Selected Variables for Rural Women, NCPS, 1981

	R	SE	N	WN	SER	SD	DEFT	ROH	SE/R	R-2SE	R+2SE	B
EVBO	3 227	0 050	4399 0	4399 0	0 039	2 590	1 268	0 019	0 015	3 128	3 326	32 3
LCHL	2 477	0 037	4403 0	4403 0	0 030	1 989	1 246	0 018	0 015	2 402	2 551	32 4
LSOY	1 287	0 022	4393 0	4393 0	0 019	1 242	1 190	0 013	0 017	1 242	1 331	32 3
CPGN	0 104	0 005	4399 0	4399 0	0 005	0 305	1 067	0 004	0 047	0 094	0 114	32 3
BT1Y	0 197	0 006	4405 0	4405 0	0 006	0 398	0 994	-0 000	0 030	0 185	0 209	32 4
BT5Y	0 841	0 015	4405 0	4405 0	0 012	0 805	1 226	0 016	0 018	0 811	0 871	32 4
DECH	0 480	0 010	4404 0	4404 0	0 008	0 500	1 265	0 019	0 020	0 461	0 497	32 4
FSIZ	4 094	0 033	3929 0	3929 0	0 024	1 509	1 389	0 033	0 008	4 027	4 161	28 9
MKNW	0 504	0 013	4405 0	4405 0	0 008	0 500	1 704	0 061	0 025	0 479	0 530	32 4
EVUS	0 075	0 006	4405 0	4405 0	0 004	0 263	1 430	0 033	0 076	0 063	0 086	32 4
CUSE	0 059	0 003	4405 0	4405 0	0 004	0 235	1 353	0 026	0 082	0 049	0 068	32 4

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